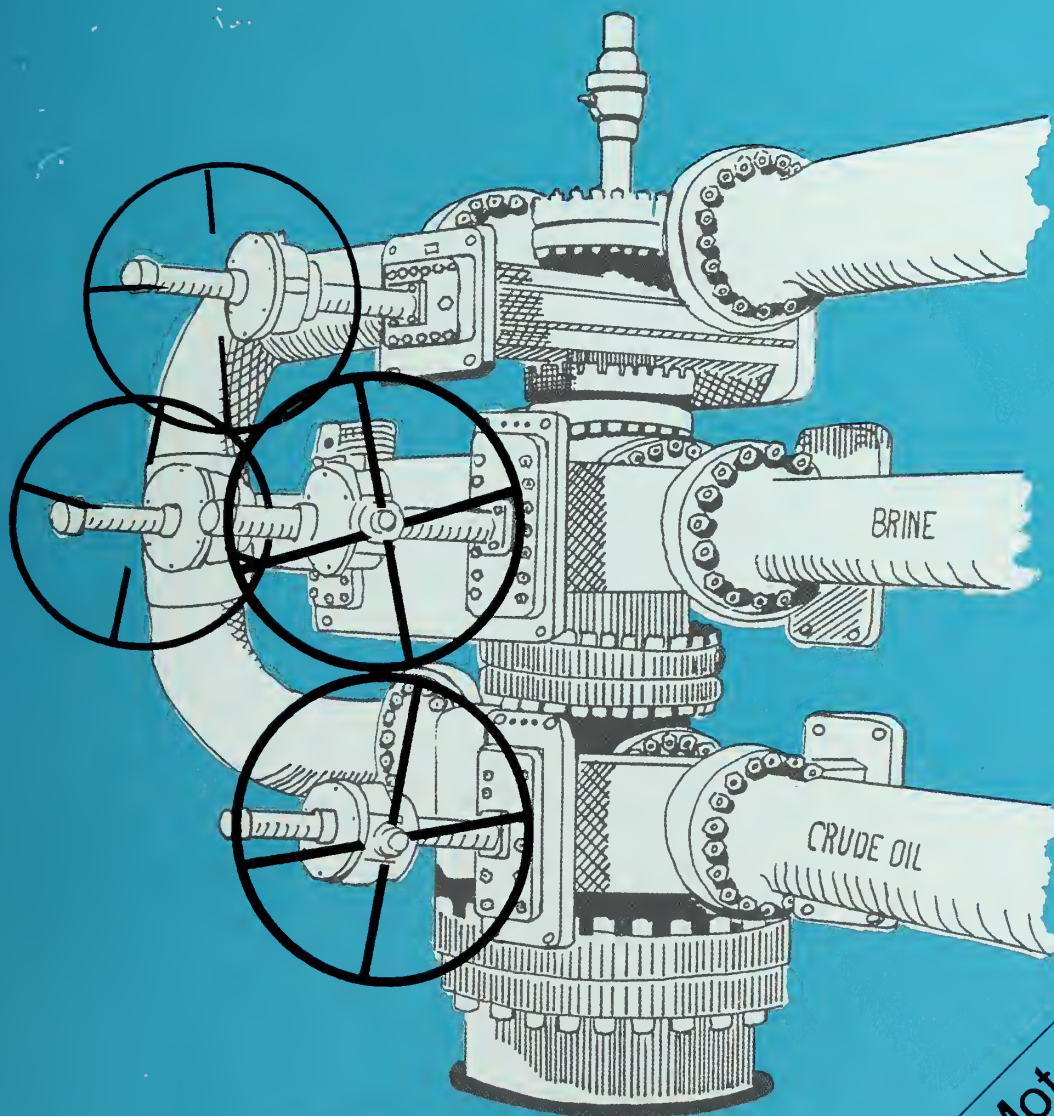


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# Petroleum Supply Annual 1996 Volume 1



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*On The Cover: Artist's rendition of a wellhead such as those used in the Strategic Petroleum Reserve program which is designed to diminish the impact of a severe interruption of the United States' oil supply. Since 1976, the Department of Energy has been involved in a major facilities development program to stockpile crude oil. The Strategic Petroleum Reserve program has four underground crude oil storage sites in salt domes. These sites are organized into three distribution systems and connected by DOE pipelines to commercial crude oil pipeline networks and marine terminals for drawdown and distribution.*



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Note: Annual refinery capacity data for January 1, 1995 and 1997 are now available on EIA's Home Page ([www.eia.doe.gov](http://www.eia.doe.gov)). Data are available in table format and database format (available for downloading).

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# Petroleum Supply Annual 1996

## Volume 1

June 1997

### Energy Information Administration

Office of Oil and Gas  
U.S. Department of Energy  
Washington, DC 20585

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Publications/Sources	Platform	Information
<b><i>Weekly Petroleum Status Report</i></b>		
Wednesday 9:00 a.m. (weekly)	EPUB/WWW	Table 1 (U.S. Balance Sheet) and Data Log (Table 14 plus 4-week averages)
Wednesday 5:00 p.m. 6th-12th (monthly)	EPUB/WWW	Table H1 (Petroleum Supply Summary)
Thursday by Noon (weekly)	COGIS	Table 1 (U.S. Balance Sheet) and Table 14 (Most recent 5-weeks)
Thursday by Noon 7th-13th (monthly)	COGIS	Table H1 (Petroleum Supply Summary)
<b><i>Winter Fuels Report</i> (October through March)</b>		
Wednesday 5:00 p.m. (weekly)	EPUB/WWW	All tables and highlights
Thursday by Noon (weekly)	COGIS	All tables and highlights
<b><i>Propane Data</i> (April through September)</b>		
Second Wednesday of the month (9:00 a.m.)	EPUB/WWW	Propane Stocks
<b><i>Petroleum Supply Monthly</i></b>		
23rd-26th (monthly)	EPUB/WWW	Table H1 (Petroleum Supply Summary) and all Summary Statistics and Detailed Statistics Tables
23rd-26th (monthly)	COGIS	Table H1 (Petroleum Supply Summary), and all Summary Statistics and Detailed Statistics Tables
<b><i>Petroleum Supply Annual</i></b>	WWW	All tables and data bases
<b><i>Oxygenate Data</i></b>		
15 working days after the report month	EPUB/WWW	Table D1 U.S. Summary Table D2 (Fuel Ethanol Production/Stocks) and Table D3 (MTBE Production/Stocks) Table D4 (MTBE Merchant and Captive)
<b><i>Imports Data</i></b>		
7th-10th (preliminary)	EPUB/WWW	Import data by company from the Form EIA-814, "Monthly Imports Report"
23rd-26th (final)		

COGIS= Comprehensive Oil and Gas Information Source  
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Petroleum Marketing Monthly, updated by the 8th of the month

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Natural Gas Monthly, updated on the 20th of the month

Weekly Coal Production, updated on Fridays by 5:00 p.m.

Quarterly Coal Report, updated 60 days after the end of the quarter

Electric Power Monthly, updated the first week of the month

Monthly Energy Review, updated the last week of the month

Short Term Energy Outlook, updated 60 days after the end of the quarter

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# Preface

The *Petroleum Supply Annual* (PSA) contains information on the supply and disposition of crude oil and petroleum products. The publication reflects data that were collected from the petroleum industry during 1996 through annual and monthly surveys. The PSA is divided into two volumes. This first volume contains three sections: Summary Statistics, Detailed Statistics, and Refinery Capacity; each with final annual data. The second volume contains final statistics for each month of 1996, and replaces data previously published in the *Petroleum Supply Monthly* (PSM). The tables in Volumes 1 and 2 are similarly numbered to facilitate comparison between them. Below is a description of each section in Volume 1 of the PSA.

## Summary Statistics

This section contains a summary of the data presented each month in the PSM and in Volume 2 of the PSA. Graphs and tables are provided which show 16 years of data depicting the balance between supply, disposition and ending stocks for various commodities including crude oil, motor gasoline, distillate fuel oil, residual fuel oil, jet fuel, propane/propylene, and liquefied petroleum gases.

## Detailed Statistics

The tables contained in this section provide 1996 detailed statistics on supply and disposition, refinery operations, imports and exports, stocks, and transportation of crude oil and petroleum products. In most cases, the statistics are presented for several geographic areas -- the United States (50 States and the District of Columbia), five Petroleum Administration for Defense (PAD) Districts, and 12 Refining Districts. At the U.S. and PAD District level, the total volume and the daily rate of activities are presented.

## Refinery Capacity

The tables contained in this section are compiled from the Form EIA-820 "Biennial Refinery Report." Of particular note are listings of refineries and associated crude oil distillation and downstream capacities by State, as of January 1, 1997, as well as summaries of corporate refinery capacities and refinery storage capacities. In addition, refinery receipts of crude oil by method of transportation for 1996 are provided. Also included are fuels consumed at refineries, and lists of shutdowns, sales, reactivations, and mergers during 1995 and 1996.

## Appendices

Three appendices are provided to assist in understanding and interpreting the data presented in this publication. Industry terminology and product definitions are listed alphabetically in the Glossary.

- Appendix A (District Descriptions and Maps) - Geographic aggregations of the 50 States and the District of Columbia into Refining Districts which make up the PAD Districts.
- Appendix B (Detailed Statistics Explanatory Notes) - Information describing data collection, sources, estimation methodology, data quality control procedures, modifications to reporting requirements and interpretation of tables.
- Appendix C (1995 Revised Crude Oil Production) - Updated monthly and annual crude oil production statistics received after the publication of the 1995 PSA.



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## Summary Statistics



*Incinerators such as this one at a chemical installation turn toxic chemicals into water vapor and other harmless elements.*



**Table S1. Crude Oil and Petroleum Products Overview, 1981 - Present**  
(Thousand Barrels per Day, Except Where Noted)

Year/Month	Field Production			Stock Change <sup>a</sup>		Petroleum Products Supplied	Ending Stocks <sup>b</sup> (Million Barrels)
	Total Domestic <sup>c</sup>	Crude Oil	Natural Gas Plant Liquids	Crude Oil <sup>d</sup>	Petroleum Products		Crude Oil <sup>d</sup> and Petroleum Products
1981 Average .....	10,230	8,572	1,609	<sup>g</sup> 290	<sup>g</sup> -130	16,058	1,484
1982 Average .....	10,252	8,649	1,550	136	-283	15,296	<sup>g</sup> 1,430
1983 Average .....	10,299	8,688	1,559	<sup>g</sup> 214	<sup>g</sup> -234	15,231	1,454
1984 Average .....	10,554	8,879	1,630	199	81	15,726	1,556
1985 Average .....	10,636	8,971	1,609	50	-153	15,726	1,519
1986 Average .....	10,289	8,680	1,551	78	124	16,281	1,593
1987 Average .....	10,008	8,349	1,595	128	-87	16,665	1,607
1988 Average .....	9,818	8,140	1,625	1	-29	17,283	1,597
1989 Average .....	9,219	7,613	1,546	86	-129	17,325	1,581
1990 Average .....	8,994	7,355	1,559	-35	142	16,988	1,621
1991 Average .....	9,168	7,417	1,659	-42	32	16,714	1,617
1992 Average .....	8,996	7,171	1,697	-1	-68	17,033	<sup>g</sup> 1,592
1993 Average .....	8,836	6,847	1,736	81	70	17,237	1,647
1994 January .....	8,694	6,817	1,615	90	<sup>g</sup> -906	18,072	<sup>g</sup> 1,622
February .....	8,611	6,770	1,633	-97	-1,190	18,337	1,586
March .....	8,675	6,746	1,668	324	-379	17,313	1,584
April .....	8,524	6,612	1,679	-68	284	17,489	1,591
May .....	8,614	6,688	1,711	-253	954	17,181	1,612
June .....	8,586	6,611	1,733	-104	497	17,815	1,624
July .....	8,550	6,501	1,753	148	824	17,485	1,654
August .....	8,526	6,544	1,760	-129	291	18,117	1,659
September .....	8,670	6,609	1,792	227	579	17,490	1,684
October .....	8,683	6,658	1,748	255	-607	17,719	1,673
November .....	8,758	6,628	1,815	102	380	17,315	1,687
December .....	8,842	6,760	1,807	-292	-813	18,319	1,653
Average .....	8,645	6,662	1,727	18	-2	17,718	--
1995 January .....	8,764	6,682	1,787	-219	-84	17,219	1,643
February .....	8,935	6,794	1,780	-49	-1,225	18,279	1,608
March .....	8,619	6,600	1,776	336	-552	17,484	1,601
April .....	8,720	6,604	1,794	-101	114	17,142	1,601
May .....	8,729	6,629	1,790	-132	464	17,293	1,612
June .....	8,607	6,579	1,740	-148	57	18,131	1,609
July .....	8,500	6,449	1,751	-397	897	17,147	1,624
August .....	8,498	6,447	1,730	-253	-73	18,044	1,614
September .....	8,467	6,416	1,757	-64	243	18,026	1,620
October .....	8,501	6,421	1,757	168	-589	17,651	1,607
November .....	8,662	6,585	1,797	263	-352	17,979	1,604
December .....	8,533	6,530	1,691	-505	-822	18,366	1,563
Average .....	8,626	6,560	1,762	-93	-153	17,725	--
1996 January .....	8,564	6,495	1,716	-8	-592	18,261	1,544
February .....	8,558	6,577	1,680	-63	-1,454	18,620	1,500
March .....	8,718	6,571	1,814	-132	-464	18,301	1,482
April .....	8,597	6,444	1,845	29	633	17,885	1,502
May .....	8,502	6,394	1,806	2	576	17,957	1,520
June .....	8,550	6,458	1,833	305	593	18,107	1,546
July .....	8,486	6,338	1,829	-244	358	18,211	1,550
August .....	8,535	6,360	1,858	-19	-130	18,658	1,545
September .....	8,623	6,482	1,872	-499	701	17,655	1,551
October .....	8,685	6,481	1,912	186	-630	19,171	1,538
November .....	8,730	6,476	1,915	-414	-117	18,535	1,522
December .....	8,738	6,506	1,876	-627	165	18,334	1,507
Average .....	8,607	6,465	1,830	-124	-28	18,309	--

<sup>a</sup> A negative number indicates a decrease in stocks and a positive number indicates an increase.

<sup>b</sup> Stocks are totals as of end of period.

<sup>c</sup> Includes crude oil, natural gas plant liquids, and other liquids. Beginning in 1993, fuel ethanol blended into finished motor gasoline and oxygenate production from merchant MTBE plants are also included.

<sup>d</sup> Includes stocks located in the Strategic Petroleum Reserve.

<sup>e</sup> Includes crude oil for storage in the Strategic Petroleum Reserve.

<sup>f</sup> Net Imports equal Imports minus Exports.

<sup>g</sup> In January 1981 and 1983, numerous respondents were added to surveys affecting stocks reported and stock change calculations. Stock changes are calculated using new basis stock levels. Bulk terminal and pipeline stocks of oxygenates were added beginning in January 1993. See Summary Statistics Explanatory Note 2.

Footnotes continued on following page.



**Table S1. Crude Oil and Petroleum Products Overview, 1981 - Present (Continued)**  
(Thousand Barrels per Day, Except Where Noted)

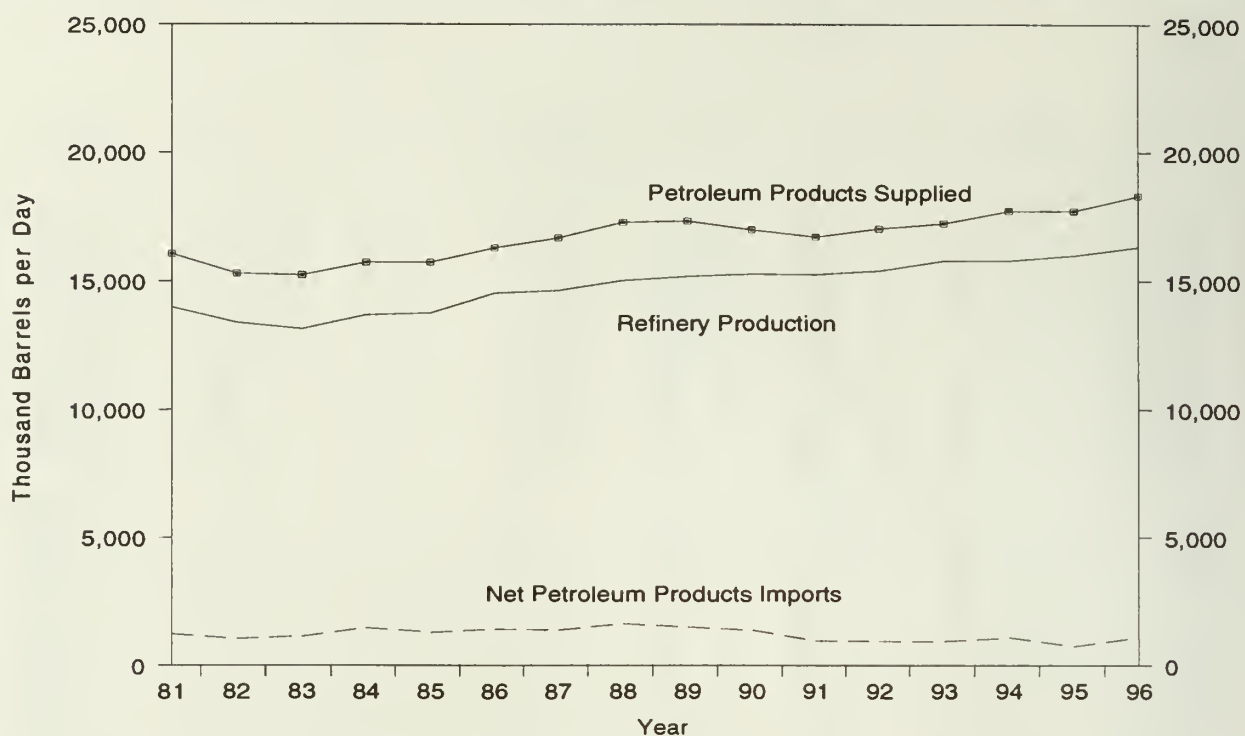
Year/Month	Imports			Exports			Net Imports <sup>1</sup>
	Total	Crude Oil <sup>a</sup>	Petroleum Products	Total	Crude Oil	Petroleum Products	
1981 Average .....	5,996	4,396	1,599	595	228	367	5,401
1982 Average .....	5,113	3,488	1,625	815	236	579	4,298
1983 Average .....	5,051	3,329	1,722	739	164	575	4,312
1984 Average .....	5,437	3,426	2,011	722	181	541	4,715
1985 Average .....	5,067	3,201	1,866	781	204	577	4,286
1986 Average .....	6,224	4,178	2,045	785	154	631	5,439
1987 Average .....	6,678	4,674	2,004	764	151	613	5,914
1988 Average .....	7,402	5,107	2,295	815	155	661	6,587
1989 Average .....	8,061	5,843	2,217	859	142	717	7,202
1990 Average .....	8,018	5,894	2,123	857	109	748	7,161
1991 Average .....	7,627	5,782	1,844	1,001	116	885	6,626
1992 Average .....	7,888	6,083	1,805	950	89	861	6,938
1993 Average .....	8,620	6,787	1,833	1,003	98	904	7,618
1994 January .....	7,993	5,945	2,048	927	110	817	7,066
February .....	8,539	6,313	2,226	882	116	766	7,657
March .....	8,574	6,372	2,202	936	40	896	7,638
April .....	8,968	6,955	2,013	868	120	749	8,100
May .....	9,213	7,198	2,015	929	118	812	8,284
June .....	9,305	7,358	1,947	867	107	760	8,438
July .....	9,779	7,857	1,922	877	84	793	8,902
August .....	9,510	7,488	2,022	913	72	841	8,597
September .....	9,693	7,868	1,825	891	61	830	8,802
October .....	8,788	7,136	1,651	997	138	859	7,791
November .....	8,707	7,034	1,674	1,000	102	898	7,707
December .....	8,863	7,193	1,670	1,208	118	1,090	7,655
Average .....	8,996	7,063	1,933	942	99	843	8,054
1995 January .....	8,015	6,505	1,509	978	113	865	7,037
February .....	8,345	6,546	1,799	1,062	95	967	7,283
March .....	9,006	7,391	1,615	948	68	880	8,059
April .....	8,465	7,038	1,427	998	155	842	7,467
May .....	8,709	7,325	1,384	876	73	803	7,832
June .....	9,558	7,927	1,631	919	101	818	8,639
July .....	8,863	7,265	1,598	895	103	792	7,969
August .....	9,061	7,437	1,624	821	61	759	8,240
September .....	9,736	8,007	1,729	805	74	731	8,930
October .....	8,577	7,075	1,502	962	50	912	7,615
November .....	9,074	7,302	1,772	1,002	118	884	8,072
December .....	8,612	6,916	1,696	1,135	127	1,008	7,477
Average .....	8,835	7,230	1,605	949	95	855	7,886
1996 January .....	9,364	7,303	2,061	1,070	89	981	8,294
February .....	8,390	6,612	1,778	1,048	92	956	7,342
March .....	9,092	7,215	1,877	867	94	773	8,225
April .....	9,429	7,371	2,058	976	148	828	8,453
May .....	10,007	8,029	1,977	891	37	854	9,116
June .....	9,938	7,958	1,980	895	130	766	9,043
July .....	9,820	7,800	2,020	945	139	806	8,876
August .....	9,986	8,041	1,944	896	44	852	9,090
September .....	9,142	7,353	1,789	1,104	147	957	8,038
October .....	9,837	7,701	2,136	1,045	134	911	8,792
November .....	9,244	7,344	1,900	1,024	172	852	8,220
December .....	9,417	7,307	2,110	1,013	96	917	8,404
Average .....	9,478	7,508	1,971	981	110	871	8,498

Footnotes continued.

Notes: • Crude oil includes lease condensate. • Geographic coverage is the 50 States and the District of Columbia. • Totals may not equal sum of components due to independent rounding.

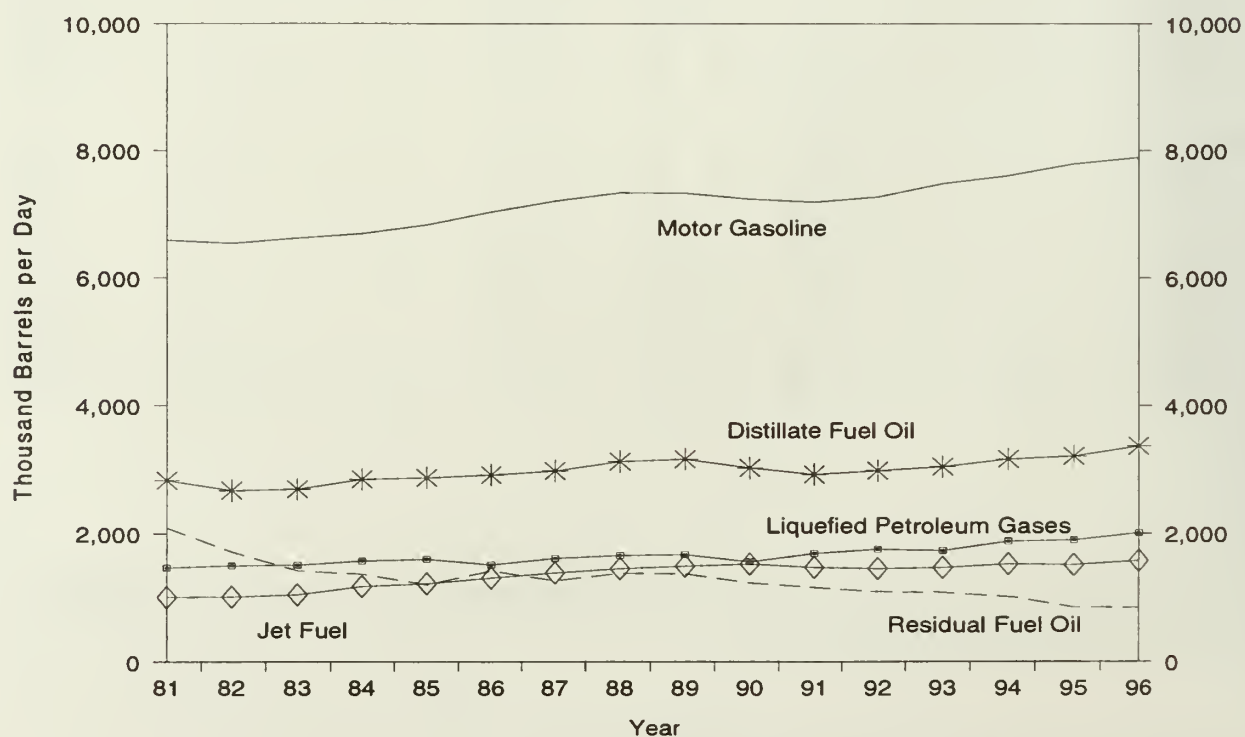
Source: See Summary Statistics Table and Figure Sources.

**Figure S1. Petroleum Overview, 1981 - Present**



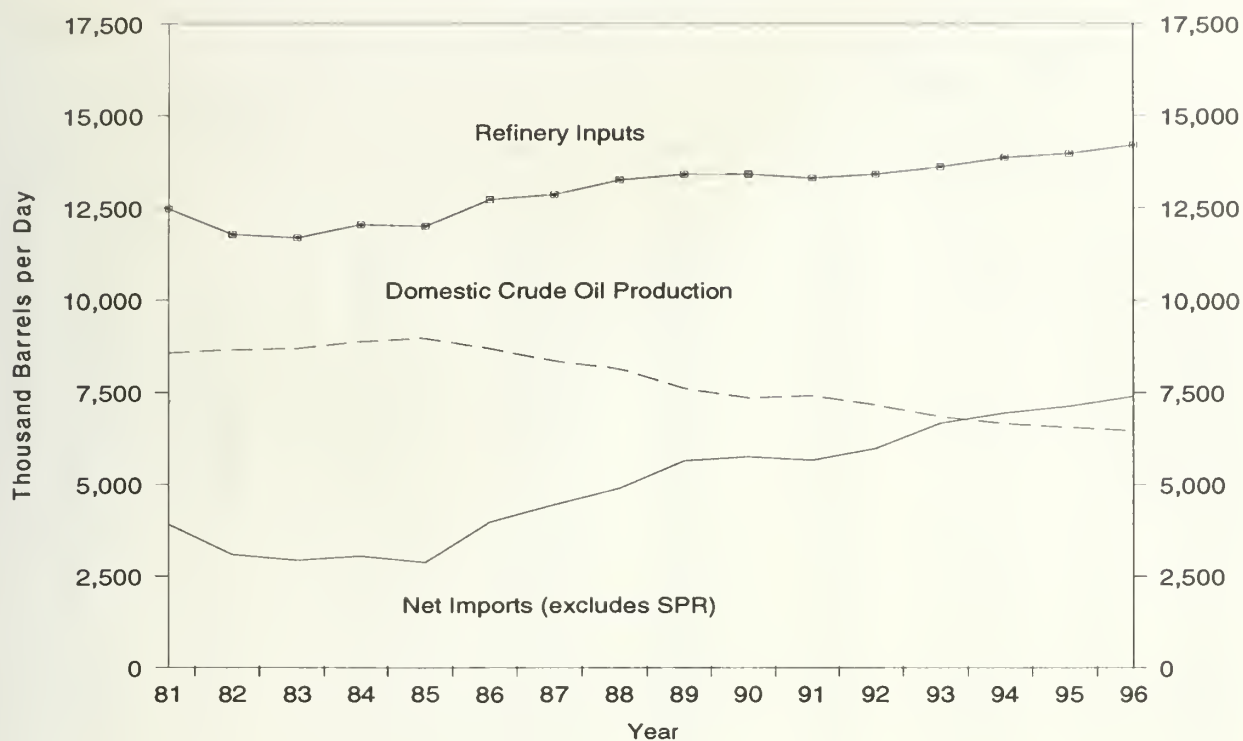
Source: Energy Information Administration, *Petroleum Supply Annual*, Table S1. See Summary Statistics Table and Figure Sources.

**Figure S2. Petroleum Products Supplied, 1981 - Present**



Source: Energy Information Administration, *Petroleum Supply Annual*, Tables S4 - S8. See Summary Statistics Table and Figure Sources.

Figure S3. Crude Oil Supply and Disposition, 1981 - Present



Source: Energy Information Administration, *Petroleum Supply Annual*, Table S2. See Summary Statistics Table and Figure Sources.

Figure S4. Crude Oil Ending Stocks,<sup>1</sup> 1981 - Present



<sup>1</sup>Excludes stocks held in the Strategic Petroleum Reserve (SPR).

Source: Energy Information Administration, *Petroleum Supply Annual*, Table S2. See Summary Statistics Table and Figure Sources.



**Table S2. Crude Oil Supply and Disposition, 1981 - Present**  
(Thousand Barrels per Day, Except Where Noted)

Year/Month		Supply						Disposition
		Field Production		Imports			Unaccounted for Crude Oil <sup>c</sup>	Crude Losses
		Total Domestic	Alaskan	Total	SPR	Other		
1981	Average .....	8,572	1,609	4,396	256	4,141	83	5
1982	Average .....	8,649	1,696	3,488	165	3,323	71	3
1983	Average .....	8,688	1,714	3,329	234	3,096	114	2
1984	Average .....	8,879	1,722	3,426	197	3,229	185	2
1985	Average .....	8,971	1,825	3,201	118	3,083	145	1
1986	Average .....	8,680	1,867	4,178	48	4,130	139	(s)
1987	Average .....	8,349	1,962	4,674	73	4,601	145	(s)
1988	Average .....	8,140	2,017	5,107	51	5,055	196	(s)
1989	Average .....	7,613	1,874	5,843	56	5,787	200	(s)
1990	Average .....	7,355	1,773	5,894	27	5,867	258	(s)
1991	Average .....	7,417	1,798	5,782	0	5,782	195	(s)
1992	Average .....	7,171	1,714	6,083	10	6,073	258	(s)
1993	Average .....	6,847	1,582	6,787	15	6,772	168	(s)
1994	January .....	6,817	1,658	5,945	0	5,945	734	0
	February .....	6,770	1,597	6,313	0	6,313	77	0
	March .....	6,746	1,583	6,372	99	6,273	242	(s)
	April .....	6,612	1,504	6,955	31	6,925	302	(s)
	May .....	6,688	1,578	7,198	0	7,198	260	0
	June .....	6,611	1,517	7,358	17	7,341	393	(s)
	July .....	6,501	1,495	7,857	0	7,857	226	0
	August .....	6,544	1,500	7,488	0	7,488	409	0
	September .....	6,609	1,514	7,868	0	7,868	54	0
	October .....	6,658	1,604	7,136	0	7,136	136	0
	November .....	6,628	1,518	7,034	0	7,034	516	0
	December .....	6,760	1,636	7,193	0	7,193	-165	0
		Average .....	6,662	1,559	7,063	12	7,051	266
1995	January .....	6,682	1,575	6,505	0	6,505	318	(s)
	February .....	6,794	1,578	6,546	0	6,546	78	0
	March .....	6,600	1,525	7,391	0	7,391	-101	(s)
	April .....	6,604	1,511	7,038	0	7,038	237	0
	May .....	6,629	1,518	7,325	0	7,325	296	0
	June .....	6,579	1,484	7,927	0	7,927	6	0
	July .....	6,449	1,401	7,265	0	7,265	402	0
	August .....	6,447	1,432	7,437	0	7,437	207	(s)
	September .....	6,416	1,377	8,007	0	8,007	-5	0
	October .....	6,421	1,475	7,075	0	7,075	328	(s)
	November .....	6,585	1,472	7,302	0	7,302	334	0
	December .....	6,530	1,466	6,916	0	6,916	193	0
		Average .....	6,560	1,484	7,230	0	7,230	193
1996	January .....	6,495	1,444	7,303	0	7,303	20	0
	February .....	6,577	1,482	6,612	0	6,612	413	0
	March .....	6,571	1,454	7,215	0	7,215	-25	0
	April .....	6,444	1,367	7,371	0	7,371	665	(s)
	May .....	6,394	1,341	8,029	0	8,029	61	0
	June .....	6,458	1,419	7,958	0	7,958	594	0
	July .....	6,338	1,317	7,800	0	7,800	121	(s)
	August.....	6,360	1,327	8,041	0	8,041	54	0
	September .....	6,482	1,401	7,353	0	7,353	303	0
	October .....	6,481	1,379	7,701	0	7,701	420	0
	November .....	6,476	1,403	7,344	0	7,344	148	0
	December .....	6,506	1,392	7,307	0	7,307	-153	0
		Average .....	6,465	1,393	7,508	0	7,508	215

<sup>a</sup> Stocks are totals as of end of period.

<sup>b</sup> A negative number indicates a decrease in stocks and a positive number indicates an increase.

<sup>c</sup> Unaccounted for crude oil represents the difference between the supply and disposition of crude oil.

<sup>d</sup> Previously published as crude used directly.

<sup>e</sup> Stock changes are calculated using new basis stock levels. See Summary Statistics Explanatory Note 2.

Footnotes continued on following page.

**Table S2. Crude Oil Supply and Disposition, 1981 - Present (Continued)**  
(Thousand Barrels per Day, Except Where Noted)

Year/Month	Disposition					Ending Stocks <sup>a</sup> (Million Barrels)		
	Stock Change <sup>b</sup>		Refinery Inputs	Exports	Product Supplied	Total	SPR	Other Primary
	SPR	Other						
1981 Average .....	336	<sup>e</sup> -46	12,470	228	<sup>d</sup> 58	594	230	363
1982 Average .....	174	-38	11,774	236	<sup>d</sup> 59	<sup>e</sup> 644	294	<sup>e</sup> 350
1983 Average .....	234	<sup>e</sup> -20	11,685	164	66	723	379	344
1984 Average .....	195	4	12,044	181	64	796	451	345
1985 Average .....	117	-67	12,002	204	60	814	493	321
1986 Average .....	50	28	12,716	154	49	843	512	331
1987 Average .....	80	49	12,854	151	34	890	541	349
1988 Average .....	52	-51	13,246	155	40	890	560	330
1989 Average .....	56	30	13,401	142	28	921	580	341
1990 Average .....	16	-51	13,409	109	24	908	586	323
1991 Average .....	-47	5	13,301	116	18	893	569	325
1992 Average .....	17	-18	13,411	89	13	893	575	318
1993 Average .....	34	47	13,613	98	10	922	587	335
1994 January .....	4	87	13,286	110	10	925	587	338
February .....	(s)	-97	13,130	116	12	923	587	335
March .....	99	226	12,985	40	10	933	590	342
April .....	31	-98	13,809	120	9	931	591	339
May .....	(s)	-253	14,272	118	9	923	591	332
June .....	16	-120	14,351	107	7	920	592	328
July .....	(s)	148	14,344	84	8	924	592	333
August .....	(s)	-129	14,491	72	7	920	592	329
September .....	0	227	14,234	61	9	927	592	335
October .....	0	255	13,529	138	8	935	592	343
November .....	(s)	102	13,968	102	7	938	592	346
December .....	(s)	-292	13,951	118	10	929	592	337
Average .....	13	5	13,866	99	9	--	--	--
1995 January .....	(s)	-219	13,604	113	7	922	592	330
February .....	(s)	-49	13,365	95	8	921	592	329
March .....	(s)	336	13,480	68	7	931	592	339
April .....	(s)	-101	13,817	155	7	928	592	336
May .....	(s)	-132	14,303	73	7	924	592	332
June .....	(s)	-148	14,553	101	5	920	592	328
July .....	(s)	-397	14,403	103	7	907	592	316
August .....	(s)	-253	14,276	61	6	899	592	308
September .....	(s)	-63	14,402	74	6	898	592	306
October .....	(s)	169	13,598	50	8	903	592	311
November .....	-1	264	13,833	118	7	911	592	319
December .....	(s)	-505	14,011	127	6	895	592	303
Average .....	(s)	-93	13,973	95	7	--	--	--
1996 January .....	(s)	-8	13,728	89	11	895	592	303
February .....	(s)	-62	13,564	92	8	893	592	301
March .....	-80	-52	13,793	94	7	889	589	300
April .....	-88	117	14,295	148	6	890	586	303
May .....	-22	24	14,439	37	7	890	586	304
June .....	-45	350	14,569	130	6	899	584	314
July .....	-50	-194	14,359	139	5	891	583	308
August .....	-172	153	14,424	44	6	891	578	313
September .....	-130	-368	14,484	147	6	876	574	302
October .....	-1	187	14,277	134	5	882	574	308
November .....	-127	-288	14,204	172	5	869	570	299
December .....	-129	-498	14,185	96	6	850	566	284
Average .....	-71	-53	14,195	110	6	--	--	--

Footnotes continued.

SPR = Strategic Petroleum Reserve.

(s)=Less than 500 barrels per day.

Notes: • Crude oil includes lease condensate. • Geographic coverage is the 50 States and the District of Columbia. • Totals may not equal sum of components due to independent rounding.

Source: See Summary Statistics Table and Figure Sources.

**Table S3. Crude Oil and Petroleum Product Imports, 1981 - Present**  
(Thousand Barrels per Day)

Year/Month		Imports from Arab-OPEC Sources							
		Algeria		Iraq		Kuwait <sup>b</sup>		Libya	
		Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil
1981	Average .....	311	261	(s)	0	0	0	319	317
1982	Average .....	170	90	3	3	5	2	26	23
1983	Average .....	240	176	10	10	14	7	0	0
1984	Average .....	323	194	12	12	36	24	1	0
1985	Average .....	187	84	46	46	21	4	4	0
1986	Average .....	271	78	81	81	68	28	0	0
1987	Average .....	295	115	83	82	84	70	0	0
1988	Average .....	300	58	345	343	92	80	0	0
1989	Average .....	269	60	449	441	157	155	0	0
1990	Average .....	280	63	518	514	86	79	0	0
1991	Average .....	253	44	0	0	6	6	0	0
1992	Average .....	196	24	0	0	51	39	0	0
1993	Average .....	220	24	0	0	353	344	0	0
1994	January .....	224	8	0	0	309	309	0	0
	February .....	226	20	0	0	423	423	0	0
	March .....	278	0	0	0	476	476	0	0
	April .....	245	30	0	0	261	238	0	0
	May .....	261	0	0	0	362	362	0	0
	June .....	178	2	0	0	255	255	0	0
	July .....	301	38	0	0	345	345	0	0
	August .....	282	39	0	0	306	306	0	0
	September .....	237	20	0	0	361	361	0	0
	October .....	217	38	0	0	165	148	0	0
	November .....	203	20	0	0	249	240	0	0
	December .....	259	39	0	0	240	227	0	0
	Average .....	243	21	0	0	312	307	0	0
1995	January .....	153	0	0	0	130	120	0	0
	February .....	358	64	0	0	346	324	0	0
	March .....	196	19	0	0	252	252	0	0
	April .....	251	31	0	0	171	164	0	0
	May .....	163	36	0	0	208	204	0	0
	June .....	277	39	0	0	260	259	0	0
	July .....	257	11	0	0	195	195	0	0
	August .....	298	65	0	0	180	175	0	0
	September .....	250	20	0	0	187	182	0	0
	October .....	229	39	0	0	250	244	0	0
	November .....	241	0	0	0	238	238	0	0
	December .....	152	0	0	0	215	215	0	0
	Average .....	234	27	0	0	218	213	0	0
1996	January .....	313	38	0	0	148	145	0	0
	February .....	200	16	0	0	216	216	0	0
	March .....	241	38	0	0	127	127	0	0
	April .....	211	2	0	0	201	201	0	0
	May .....	340	0	0	0	230	230	0	0
	June .....	313	0	0	0	388	388	0	0
	July .....	305	0	0	0	266	266	0	0
	August .....	323	0	0	0	271	266	0	0
	September .....	186	0	0	0	236	236	0	0
	October .....	209	0	0	0	260	260	0	0
	November .....	214	3	0	0	228	228	0	0
	December .....	214	0	14	14	262	262	0	0
	Average .....	256	8	1	1	236	235	0	0

See footnotes at end of table.



**Table S3. Crude Oil and Petroleum Product Imports, 1981 - Present (Continued)**  
(Thousand Barrels per Day)

Year/Month		Imports from Arab-OPEC Sources						Total Arab OPEC	
		Qatar		Saudi Arabia <sup>b</sup>		United Arab Emirates			
		Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil
1981	Average .....	7	7	1,129	1,112	81	77	1,848	1,774
1982	Average .....	7	7	552	530	92	81	854	736
1983	Average .....	(s)	0	337	321	30	18	632	533
1984	Average .....	5	4	325	309	117	90	819	634
1985	Average .....	(s)	0	168	132	45	35	472	300
1986	Average .....	13	12	685	618	44	38	1,162	854
1987	Average .....	0	0	751	642	61	56	1,274	965
1988	Average .....	0	0	1,073	911	29	23	1,839	1,415
1989	Average .....	2	2	1,224	1,116	28	21	2,130	1,794
1990	Average .....	4	4	1,339	1,195	17	9	2,244	1,864
1991	Average .....	0	0	1,802	1,703	3	2	2,064	1,754
1992	Average .....	1	0	1,720	1,597	6	0	1,974	1,660
1993	Average .....	1	0	1,414	1,282	14	12	2,000	1,661
1994	January .....	0	0	1,320	1,175	0	0	1,854	1,492
	February .....	0	0	1,071	1,023	0	0	1,719	1,467
	March .....	0	0	1,132	1,055	0	0	1,887	1,531
	April .....	0	0	1,586	1,428	4	0	2,097	1,696
	May .....	0	0	1,438	1,394	0	0	2,062	1,757
	June .....	0	0	1,395	1,277	0	0	1,829	1,535
	July .....	0	0	1,414	1,310	53	53	2,113	1,745
	August .....	0	0	1,363	1,271	0	0	1,950	1,615
	September .....	0	0	1,486	1,364	40	40	2,125	1,786
	October .....	0	0	1,601	1,500	38	23	2,020	1,709
	November .....	0	0	1,477	1,357	0	0	1,929	1,617
	December .....	0	0	1,526	1,388	15	15	2,040	1,669
	Average .....	0	0	1,402	1,297	13	11	1,970	1,636
1995	January .....	0	0	1,309	1,251	20	20	1,613	1,391
	February .....	0	0	1,181	1,134	13	13	1,897	1,535
	March .....	0	0	1,535	1,410	0	0	1,983	1,681
	April .....	0	0	1,375	1,321	0	0	1,798	1,516
	May .....	0	0	1,281	1,237	0	0	1,653	1,477
	June .....	0	0	1,287	1,221	12	1	1,835	1,520
	July .....	0	0	1,265	1,165	0	0	1,716	1,371
	August .....	0	0	1,340	1,245	20	20	1,838	1,505
	September .....	0	0	1,474	1,357	29	0	1,941	1,559
	October .....	0	0	1,260	1,181	14	0	1,753	1,464
	November .....	0	0	1,429	1,326	10	10	1,918	1,574
	December .....	0	0	1,378	1,263	0	0	1,745	1,478
	Average .....	0	0	1,344	1,260	10	5	1,806	1,505
1996	January .....	0	0	1,398	1,334	0	0	1,859	1,517
	February .....	0	0	1,128	1,053	0	0	1,544	1,285
	March .....	0	0	1,422	1,318	0	0	1,790	1,484
	April .....	0	0	1,288	1,200	0	0	1,700	1,403
	May .....	0	0	1,518	1,414	0	0	2,087	1,643
	June .....	0	0	1,138	1,035	11	11	1,850	1,433
	July .....	0	0	1,548	1,371	4	4	2,123	1,642
	August.....	0	0	1,477	1,333	0	0	2,070	1,599
	September .....	0	0	1,355	1,255	0	0	1,777	1,491
	October .....	0	0	1,357	1,209	17	17	1,844	1,486
	November .....	0	0	1,297	1,201	0	0	1,738	1,432
	December .....	0	0	1,400	1,236	0	0	1,889	1,511
	Average .....	0	0	1,363	1,248	3	3	1,859	1,496

See footnotes at end of table.

**Table S3. Crude Oil and Petroleum Product Imports, 1981 - Present (Continued)**  
(Thousand Barrels per Day)

Year/Month		Imports from Other-OPEC Sources							
		Ecuador <sup>c</sup>		Gabon		Indonesia		Iran	
		Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil
1981	Average .....	48	38	35	35	366	318	0	0
1982	Average .....	42	32	40	40	248	226	35	35
1983	Average .....	61	56	59	59	338	315	48	48
1984	Average .....	55	47	58	57	343	304	10	10
1985	Average .....	67	56	52	51	314	292	27	27
1986	Average .....	77	64	26	25	318	297	19	19
1987	Average .....	29	23	35	35	285	262	98	98
1988	Average .....	47	33	16	15	205	186	<sup>g</sup> (s)	<sup>g</sup> (s)
1989	Average .....	89	80	50	49	183	158	0	0
1990	Average .....	49	38	64	64	114	98	0	0
1991	Average .....	63	53	84	84	111	102	32	32
1992	Average .....	65	62	124	123	78	70	0	0
1993	Average .....	81	78	152	151	81	65	0	0
1994	January .....	(c)	(c)	144	144	140	81	0	0
	February .....	(c)	(c)	212	208	103	59	0	0
	March .....	(c)	(c)	91	91	112	50	0	0
	April .....	(c)	(c)	288	288	88	88	0	0
	May .....	(c)	(c)	187	187	94	76	0	0
	June .....	(c)	(c)	223	223	155	155	0	0
	July .....	(c)	(c)	216	216	178	178	0	0
	August .....	(c)	(c)	142	142	119	112	0	0
	September .....	(c)	(c)	194	194	61	61	0	0
	October .....	(c)	(c)	235	235	96	89	0	0
	November .....	(c)	(c)	254	254	71	56	0	0
	December .....	(c)	(c)	154	154	113	95	0	0
	Average .....	(c)	(c)	194	194	111	92	0	0
1995	January .....	(c)	(c)	(d)	(d)	38	38	0	0
	February .....	(c)	(c)	(d)	(d)	129	87	0	0
	March .....	(c)	(c)	(d)	(d)	51	29	0	0
	April .....	(c)	(c)	(d)	(d)	95	87	0	0
	May .....	(c)	(c)	(d)	(d)	65	36	0	0
	June .....	(c)	(c)	(d)	(d)	96	51	0	0
	July .....	(c)	(c)	(d)	(d)	104	96	0	0
	August .....	(c)	(c)	(d)	(d)	122	95	0	0
	September .....	(c)	(c)	(d)	(d)	94	66	0	0
	October .....	(c)	(c)	(d)	(d)	87	68	0	0
	November .....	(c)	(c)	(d)	(d)	107	73	0	0
	December .....	(c)	(c)	(d)	(d)	72	41	0	0
	Average .....	(c)	(c)	(d)	(d)	88	64	0	0
1996	January .....	(c)	(c)	(d)	(d)	52	43	0	0
	February .....	(c)	(c)	(d)	(d)	44	43	0	0
	March .....	(c)	(c)	(d)	(d)	58	55	0	0
	April .....	(c)	(c)	(d)	(d)	57	57	0	0
	May .....	(c)	(c)	(d)	(d)	49	15	0	0
	June .....	(c)	(c)	(d)	(d)	72	65	0	0
	July .....	(c)	(c)	(d)	(d)	56	48	0	0
	August .....	(c)	(c)	(d)	(d)	53	49	0	0
	September .....	(c)	(c)	(d)	(d)	26	26	0	0
	October .....	(c)	(c)	(d)	(d)	125	82	0	0
	November .....	(c)	(c)	(d)	(d)	36	12	0	0
	December .....	(c)	(c)	(d)	(d)	81	32	0	0
	Average .....	(c)	(c)	(d)	(d)	59	44	0	0

See footnotes at end of table.



**Table S3. Crude Oil and Petroleum Product Imports, 1981 - Present (Continued)**  
(Thousand Barrels per Day)

Year/Month		Imports from Other-OPEC Sources						Total OPEC <sup>c,d</sup>	
		Nigeria		Venezuela		Total Other OPEC <sup>c</sup>			
		Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil
1981	Average .....	620	611	406	147	1,476	1,149	3,323	2,922
1982	Average .....	514	510	412	155	1,291	998	2,146	1,734
1983	Average .....	302	301	422	164	1,231	944	1,862	1,477
1984	Average .....	216	207	548	253	1,230	878	2,049	1,512
1985	Average .....	293	280	605	306	1,358	1,012	1,830	1,312
1986	Average .....	440	437	793	416	1,674	1,259	2,837	2,113
1987	Average .....	535	529	804	488	1,787	1,435	3,060	2,400
1988	Average .....	618	607	794	439	1,681	1,281	3,520	2,696
1989	Average .....	815	800	873	495	2,010	1,582	4,140	3,376
1990	Average .....	800	784	1,025	666	2,052	1,650	4,296	3,514
1991	Average .....	703	683	1,035	668	2,028	1,622	4,092	3,377
1992	Average .....	681	665	1,170	826	2,117	1,746	4,092	3,406
1993	Average .....	740	722	1,300	1,010	2,354	2,026	4,354	3,687
1994	January .....	310	274	1,211	901	1,806	1,400	3,660	2,892
	February .....	576	557	1,224	946	2,115	1,770	3,834	3,237
	March .....	441	402	1,261	932	1,903	1,474	3,790	3,006
	April .....	631	621	1,303	1,035	2,311	2,033	4,408	3,728
	May .....	732	730	1,334	1,022	2,347	2,014	4,409	3,771
	June .....	842	837	1,469	1,088	2,689	2,303	4,518	3,838
	July .....	703	694	1,296	1,029	2,393	2,116	4,506	3,861
	August .....	1,037	1,010	1,255	982	2,552	2,245	4,503	3,861
	September .....	578	578	1,428	1,106	2,261	1,939	4,386	3,725
	October .....	569	559	1,385	1,101	2,284	1,984	4,304	3,693
	November .....	485	478	1,432	1,084	2,242	1,872	4,171	3,488
	December .....	739	739	1,405	1,183	2,411	2,171	4,451	3,840
	Average .....	637	624	1,334	1,034	2,277	1,944	4,247	3,580
1995	January .....	625	617	1,442	1,061	2,105	1,717	3,718	3,108
	February .....	463	463	1,439	1,083	2,031	1,633	3,929	3,168
	March .....	687	676	1,499	1,208	2,236	1,913	4,220	3,595
	April .....	467	458	1,365	1,083	1,926	1,628	3,724	3,144
	May .....	603	592	1,480	1,176	2,148	1,804	3,801	3,281
	June .....	696	696	1,479	1,209	2,271	1,956	4,106	3,476
	July .....	696	696	1,536	1,162	2,336	1,954	4,052	3,325
	August .....	482	463	1,449	1,162	2,054	1,719	3,892	3,225
	September .....	851	841	1,655	1,288	2,600	2,195	4,541	3,753
	October .....	649	649	1,453	1,159	2,189	1,876	3,942	3,340
	November .....	646	637	1,507	1,140	2,260	1,851	4,178	3,424
	December .....	652	652	1,459	1,074	2,182	1,767	3,927	3,245
	Average .....	627	621	1,480	1,151	2,196	1,835	4,002	3,341
1996	January .....	690	663	1,518	1,148	2,261	1,854	4,120	3,371
	February .....	647	639	1,495	1,166	2,185	1,849	3,730	3,133
	March .....	594	548	1,719	1,341	2,371	1,943	4,161	3,427
	April .....	518	497	1,732	1,288	2,307	1,842	4,007	3,245
	May .....	705	705	1,700	1,333	2,454	2,054	4,541	3,697
	June .....	711	697	1,642	1,236	2,425	1,999	4,275	3,432
	July .....	750	696	1,690	1,332	2,496	2,076	4,619	3,718
	August.....	793	785	1,749	1,431	2,595	2,265	4,665	3,865
	September .....	694	677	1,708	1,269	2,428	1,972	4,204	3,463
	October .....	521	488	1,781	1,448	2,427	2,019	4,271	3,504
	November .....	465	453	1,728	1,303	2,229	1,767	3,967	3,199
	December .....	320	298	1,641	1,324	2,042	1,654	3,931	3,166
	Average .....	617	595	1,676	1,303	2,353	1,942	4,211	3,438

See footnotes at end of table.

**Table S3. Crude Oil and Petroleum Product Imports, 1981 - Present (Continued)**  
(Thousand Barrels per Day)

Year/Month		Imports from Non-OPEC Sources <sup>a</sup>											
		Angola		Australia		Bahama Islands		Brazil		Canada		China, Peoples Republic of	
		Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil
1981	Average .....	49	45	5	0	74	0	23	14	447	164	18	0
1982	Average .....	44	42	5	(s)	65	0	47	19	482	214	40	8
1983	Average .....	78	71	4	0	125	0	41	2	547	274	34	6
1984	Average .....	90	85	38	25	88	0	60	(s)	630	341	46	15
1985	Average .....	110	104	37	21	40	0	61	0	770	468	59	36
1986	Average .....	112	102	41	30	37	0	50	0	807	570	90	68
1987	Average .....	192	180	58	49	37	0	84	0	848	608	82	63
1988	Average .....	212	203	64	59	32	0	98	0	999	681	88	82
1989	Average .....	284	279	36	31	34	0	82	0	931	630	80	76
1990	Average .....	237	236	53	47	37	0	49	0	934	643	80	77
1991	Average .....	254	254	26	21	35	0	22	0	1,033	743	91	87
1992	Average .....	336	336	19	17	36	0	20	0	1,069	797	90	84
1993	Average .....	336	336	19	18	28	0	33	0	1,181	900	51	50
1994	January .....	338	338	12	0	28	0	11	0	1,242	905	81	78
	February .....	295	282	0	0	79	0	12	0	1,374	994	44	44
	March .....	291	265	11	11	52	0	10	0	1,326	987	112	104
	April .....	284	284	0	0	39	0	42	0	1,194	930	70	67
	May .....	354	331	32	32	58	0	96	0	1,160	905	80	80
	June .....	278	278	11	11	14	0	62	0	1,206	973	37	36
	July .....	304	299	44	44	18	0	53	0	1,237	994	92	92
	August .....	358	347	13	13	20	0	38	0	1,357	1,059	64	64
	September .....	455	448	35	35	17	0	21	0	1,300	1,031	63	63
	October .....	286	286	22	22	15	0	18	0	1,238	982	18	18
	November .....	328	328	22	22	8	0	0	0	1,251	988	79	79
	December .....	402	380	0	0	6	0	8	8	1,388	1,054	40	40
	Average .....	331	322	17	16	29	0	31	1	1,272	983	65	64
1995	January .....	273	262	21	21	6	0	1	0	1,345	1,011	64	62
	February .....	348	335	22	22	8	0	0	0	1,311	965	21	21
	March .....	427	416	0	0	7	0	0	0	1,208	891	54	54
	April .....	412	402	33	33	0	0	0	0	1,243	999	65	65
	May .....	419	407	21	21	0	0	0	0	1,406	1,167	35	35
	June .....	371	358	10	10	0	0	0	0	1,420	1,169	26	26
	July .....	295	287	42	42	0	0	8	0	1,279	1,028	80	80
	August .....	367	355	0	0	0	0	9	0	1,345	1,058	40	40
	September .....	444	444	0	0	8	0	43	0	1,252	959	73	73
	October .....	366	366	15	15	0	0	9	0	1,300	1,057	40	40
	November .....	318	318	(s)	0	0	0	12	0	1,403	1,069	66	66
	December .....	366	366	23	23	0	0	12	0	1,471	1,099	73	73
	Average .....	367	360	16	16	2	0	8	0	1,332	1,040	53	53
1996	January .....	312	312	21	21	0	0	1	0	1,490	1,117	86	86
	February .....	195	195	0	0	0	0	4	0	1,413	1,026	42	42
	March .....	257	257	0	0	12	0	1	0	1,322	1,001	53	53
	April .....	244	233	22	22	0	0	(s)	0	1,427	1,030	18	18
	May .....	403	379	22	22	0	0	9	0	1,373	1,056	19	19
	June .....	356	356	56	47	1	0	10	0	1,395	1,091	37	37
	July .....	292	292	11	0	0	0	28	0	1,393	1,093	78	78
	August .....	480	456	43	43	0	0	38	0	1,393	1,042	73	73
	September .....	391	391	47	27	0	0	13	0	1,276	1,000	64	64
	October .....	502	485	79	65	0	0	1	0	1,407	1,059	36	36
	November .....	353	353	35	25	0	0	1	0	1,516	1,151	104	104
	December .....	420	405	39	21	0	0	3	0	1,675	1,232	78	78
	Average .....	351	344	31	25	1	0	9	0	1,424	1,075	57	57

See footnotes at end of table.



**Table S3. Crude Oil and Petroleum Product Imports, 1981 - Present (Continued)**  
(Thousand Barrels per Day)

Year/Month		Imports from Non-OPEC Sources <sup>a</sup>											
		Colombia		Ecuador <sup>c</sup>		Gabon <sup>d</sup>		Italy		Malaysia		Mexico	
		Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil
1981	Average .....	1	0	(c)	(c)	(d)	(d)	11	0	36	33	522	469
1982	Average .....	5	0	(c)	(c)	(d)	(d)	18	(s)	20	18	685	645
1983	Average .....	10	0	(c)	(c)	(d)	(d)	18	(s)	4	3	826	766
1984	Average .....	8	0	(c)	(c)	(d)	(d)	45	(s)	1	0	748	659
1985	Average .....	23	0	(c)	(c)	(d)	(d)	60	(s)	3	1	816	715
1986	Average .....	87	57	(c)	(c)	(d)	(d)	76	0	12	11	699	621
1987	Average .....	148	115	(c)	(c)	(d)	(d)	54	1	13	12	655	602
1988	Average .....	134	106	(c)	(c)	(d)	(d)	65	5	19	19	747	674
1989	Average .....	172	136	(c)	(c)	(d)	(d)	34	3	39	39	767	716
1990	Average .....	182	140	(c)	(c)	(d)	(d)	58	2	41	40	755	689
1991	Average .....	163	123	(c)	(c)	(d)	(d)	47	3	24	24	807	759
1992	Average .....	126	102	(c)	(c)	(d)	(d)	55	0	10	10	830	787
1993	Average .....	171	141	(c)	(c)	(d)	(d)	31	0	11	10	919	863
1994	January .....	182	149	128	128	(d)	(d)	8	0	11	11	971	945
	February .....	184	131	96	96	(d)	(d)	35	0	19	15	967	926
	March .....	188	167	37	37	(d)	(d)	16	0	13	0	1,067	1,014
	April .....	241	197	52	52	(d)	(d)	13	0	3	0	987	963
	May .....	105	75	85	85	(d)	(d)	19	0	0	0	975	934
	June .....	112	101	72	72	(d)	(d)	12	0	10	10	1,040	974
	July .....	127	127	144	144	(d)	(d)	35	0	36	36	926	889
	August .....	181	181	115	115	(d)	(d)	52	0	13	7	894	852
	September .....	144	144	63	63	(d)	(d)	34	0	9	0	1,043	963
	October .....	215	215	110	110	(d)	(d)	21	0	0	0	940	881
	November .....	134	134	97	97	(d)	(d)	17	0	0	0	1,037	981
	December .....	124	124	96	96	(d)	(d)	9	0	6	0	963	944
	Average .....	161	146	91	91	(d)	(d)	22	0	10	6	984	939
1995	January .....	223	214	130	130	193	193	4	0	21	21	925	892
	February .....	139	129	107	107	186	186	1	0	0	0	922	890
	March .....	239	221	104	104	159	159	8	0	0	0	1,006	961
	April .....	175	175	146	146	163	163	13	0	7	0	993	963
	May .....	171	153	116	116	206	206	0	0	0	0	1,118	1,063
	June .....	225	202	137	137	357	357	13	0	7	0	1,138	1,076
	July .....	223	223	87	87	311	311	4	0	0	0	1,188	1,166
	August .....	330	311	116	104	246	246	0	0	0	0	1,201	1,172
	September .....	252	236	61	61	216	216	0	0	14	14	1,311	1,238
	October .....	199	190	12	12	270	270	11	0	13	5	894	854
	November .....	240	229	102	102	271	271	4	0	16	16	1,114	1,060
	December .....	200	190	51	51	171	171	3	0	17	11	996	978
	Average .....	219	207	97	96	229	229	5	0	8	6	1,068	1,027
1996	January .....	186	183	126	120	171	171	2	0	0	0	1,281	1,245
	February .....	149	139	81	81	191	191	0	0	24	17	1,083	1,062
	March .....	262	250	131	125	154	154	13	0	4	0	1,176	1,165
	April .....	280	280	158	143	212	212	(s)	0	0	0	1,303	1,273
	May .....	263	249	100	95	154	154	0	0	47	40	1,288	1,222
	June .....	250	247	138	133	218	218	16	0	19	11	1,351	1,274
	July .....	204	198	113	96	191	191	19	0	0	0	1,216	1,186
	August .....	221	217	83	71	156	156	8	0	5	0	1,157	1,142
	September .....	213	213	48	48	104	104	15	0	0	0	1,355	1,306
	October .....	265	252	66	60	226	226	4	0	31	0	1,213	1,189
	November .....	267	267	111	111	253	253	13	0	7	0	1,157	1,110
	December .....	246	218	89	72	184	184	8	0	0	0	1,346	1,301
	Average .....	234	226	104	96	184	184	8	0	11	6	1,244	1,207

See footnotes at end of table.

**Table S3. Crude Oil and Petroleum Product Imports, 1981 - Present (Continued)**  
(Thousand Barrels per Day)

Year/Month		Imports from Non-OPEC Sources <sup>a</sup>											
		Netherlands		Netherlands Antilles		Norway		Puerto Rico		Russia <sup>f</sup>		Spain	
		Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil
1981	Average .....	30	(s)	197	0	119	114	62	0	5	(s)	1	(s)
1982	Average .....	35	(s)	175	0	102	102	50	0	1	0	3	(s)
1983	Average .....	65	3	189	0	66	65	40	0	1	(s)	2	(s)
1984	Average .....	65	3	188	0	114	112	42	0	13	(s)	11	0
1985	Average .....	58	0	40	0	32	31	28	0	8	(s)	29	1
1986	Average .....	54	0	25	0	60	53	21	0	18	(s)	53	0
1987	Average .....	60	0	29	0	80	70	21	0	11	0	55	0
1988	Average .....	61	0	36	0	67	62	22	0	29	0	68	0
1989	Average .....	49	0	42	0	138	127	32	0	48	0	67	0
1990	Average .....	55	0	31	0	102	96	32	0	45	1	47	0
1991	Average .....	29	0	81	0	82	74	27	0	29	1	33	0
1992	Average .....	26	0	65	0	127	119	26	0	18	5	32	0
1993	Average .....	10	0	82	0	142	137	29	0	55	36	37	0
1994	January .....	37	0	189	0	101	96	26	0	11	0	26	0
	February .....	43	0	119	0	199	166	19	0	14	0	31	0
	March .....	43	0	112	0	108	108	21	0	34	34	37	0
	April .....	24	0	73	0	205	184	17	0	0	0	45	0
	May .....	79	0	70	0	159	159	21	0	32	32	53	0
	June .....	38	0	69	0	176	158	42	0	133	133	50	0
	July .....	35	0	121	0	276	257	43	0	82	82	25	0
	August .....	33	0	114	0	206	198	23	0	21	15	38	0
	September .....	34	0	95	0	347	336	17	0	6	0	56	0
	October .....	18	0	77	0	310	300	20	0	30	30	35	0
	November .....	1	0	96	0	214	195	6	0	0	0	22	0
	December .....	4	0	43	0	125	123	10	0	0	0	26	0
	Average .....	32	0	98	0	202	190	22	0	30	27	37	0
1995	January .....	0	0	60	0	195	158	6	0	0	0	7	0
	February .....	17	0	58	0	194	164	7	0	0	0	9	0
	March .....	21	0	68	0	241	209	13	0	0	0	16	0
	April .....	3	0	0	0	315	291	9	0	0	0	16	7
	May .....	24	0	86	0	292	292	19	0	12	0	25	0
	June .....	37	0	50	0	370	370	16	0	15	0	27	0
	July .....	9	0	65	0	263	256	17	0	41	32	10	0
	August .....	21	0	62	0	279	264	26	0	136	98	21	0
	September .....	0	0	33	0	364	359	12	0	50	32	27	0
	October .....	31	0	48	0	163	163	15	0	0	0	6	0
	November .....	20	0	69	0	255	255	27	0	28	0	16	0
	December .....	0	0	24	0	348	316	15	0	15	0	12	5
	Average .....	15	0	52	0	273	258	15	0	25	14	16	1
1996	January .....	16	0	59	0	199	178	6	0	11	0	23	0
	February .....	38	0	101	0	236	221	17	0	14	0	23	0
	March .....	35	0	35	0	284	264	24	0	18	0	58	0
	April .....	20	0	50	0	375	357	17	0	0	0	36	0
	May .....	9	0	47	0	380	364	22	0	63	63	21	0
	June .....	26	0	52	0	434	408	25	0	14	14	12	0
	July .....	7	0	45	0	375	359	25	0	42	33	47	10
	August .....	14	0	53	0	369	362	33	0	32	32	21	0
	September .....	13	0	56	0	274	254	22	0	39	37	21	0
	October .....	24	0	97	0	389	359	14	0	42	33	34	0
	November .....	18	0	79	0	249	220	20	0	0	0	33	0
	December .....	14	0	98	0	187	166	18	0	26	0	13	0
	Average .....	19	0	64	0	313	293	20	0	25	18	29	1

See footnotes at end of table.



**Table S3. Crude Oil and Petroleum Product Imports, 1981 - Present (Continued)**  
(Thousand Barrels per Day)

Year/Month		Imports from Non-OPEC Sources <sup>a</sup>										Total Imports	
		Trinidad and Tobago		United Kingdom		Virgin Islands		Other Non-OPEC		Total Non-OPEC <sup>c</sup>			
		Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil
1981	Average .....	133	102	375	369	327	0	236	163	2,672	1,474	5,996	4,396
1982	Average .....	112	92	456	441	316	0	306	174	2,968	1,754	5,113	3,488
1983	Average .....	96	83	382	365	282	0	378	215	3,189	1,853	5,051	3,329
1984	Average .....	94	87	402	378	294	0	411	210	3,388	1,914	5,437	3,426
1985	Average .....	113	98	310	278	247	0	394	137	3,237	1,888	5,067	3,201
1986	Average .....	125	93	350	317	244	0	426	144	3,387	2,065	6,224	4,178
1987	Average .....	106	75	352	304	272	0	459	196	3,617	2,274	6,678	4,674
1988	Average .....	97	71	315	254	242	0	487	196	3,882	2,411	7,402	5,107
1989	Average .....	94	73	215	160	321	0	457	197	3,921	2,467	8,061	5,843
1990	Average .....	96	76	189	155	282	0	417	180	3,721	2,381	8,018	5,894
1991	Average .....	88	72	138	106	243	0	282	137	3,535	2,405	7,627	5,782
1992	Average .....	95	70	230	200	249	0	335	149	3,796	2,676	7,888	6,083
1993	Average .....	74	55	350	312	254	0	452	240	4,266	3,100	8,620	6,787
1994	January .....	90	60	205	161	276	0	361	181	4,333	3,053	7,993	5,945
	February .....	92	80	290	232	351	0	441	111	4,705	3,077	8,539	6,313
	March .....	68	54	459	394	325	0	453	191	4,784	3,366	8,574	6,372
	April .....	76	56	377	282	325	0	496	212	4,561	3,227	8,968	6,955
	May .....	68	58	404	345	312	0	643	390	4,805	3,427	9,213	7,198
	June .....	106	79	537	485	361	0	423	209	4,787	3,520	9,305	7,358
	July .....	69	55	678	578	294	0	635	400	5,273	3,996	9,779	7,857
	August .....	85	55	514	473	356	0	513	249	5,007	3,627	9,510	7,488
	September .....	64	56	736	717	360	0	409	287	5,307	4,143	9,693	7,868
	October .....	79	65	370	323	313	0	350	212	4,484	3,444	8,788	7,136
	November .....	59	55	618	507	292	0	257	159	4,536	3,545	8,707	7,034
	December .....	74	74	305	255	369	0	414	254	4,411	3,352	8,863	7,193
	Average .....	77	62	458	396	328	0	450	239	4,749	3,483	8,996	7,063
1995	January .....	91	91	240	213	283	0	209	131	4,297	3,397	8,015	6,505
	February .....	58	58	382	359	322	0	304	143	4,416	3,378	8,345	6,546
	March .....	70	70	663	621	298	0	183	91	4,787	3,797	9,006	7,391
	April .....	55	55	491	450	284	0	317	143	4,741	3,894	8,465	7,038
	May .....	61	53	405	366	203	0	286	165	4,907	4,044	8,709	7,325
	June .....	78	74	520	418	268	0	368	253	5,453	4,451	9,558	7,927
	July .....	73	54	137	97	240	0	441	277	4,812	3,940	8,863	7,265
	August .....	74	53	288	249	264	0	343	261	5,168	4,212	9,061	7,437
	September .....	73	55	427	386	223	0	312	180	5,194	4,254	9,736	8,007
	October .....	86	70	528	479	299	0	331	214	4,635	3,735	8,577	7,075
	November .....	61	53	284	284	317	0	273	155	4,896	3,878	9,074	7,302
	December .....	53	53	238	177	334	0	262	156	4,684	3,671	8,612	6,916
	Average .....	70	62	383	341	278	0	302	181	4,833	3,889	8,835	7,230
1996	January .....	92	71	364	238	390	0	406	188	5,244	3,932	9,364	7,303
	February .....	56	56	374	280	343	0	275	169	4,660	3,479	8,390	6,612
	March .....	63	52	346	252	311	0	373	215	4,932	3,788	9,092	7,215
	April .....	87	55	481	347	359	0	333	157	5,421	4,125	9,429	7,371
	May .....	97	71	421	316	298	0	429	282	5,465	4,332	10,007	8,029
	June .....	86	54	312	234	292	0	561	402	5,663	4,526	9,938	7,958
	July .....	70	58	244	195	344	0	456	292	5,201	4,082	9,820	7,800
	August.....	81	59	274	177	279	0	508	348	5,321	4,177	9,986	8,041
	September .....	51	37	165	90	268	0	502	318	4,938	3,891	9,142	7,353
	October .....	70	55	264	136	325	0	477	240	5,566	4,196	9,837	7,701
	November .....	96	75	199	160	253	0	513	318	5,277	4,145	9,244	7,344
	December .....	58	54	253	167	294	0	438	245	5,487	4,142	9,417	7,307
	Average .....	76	58	308	216	313	0	440	265	5,267	4,070	9,478	7,508

<sup>a</sup> Includes petroleum imported into the United States indirectly from members of the Organization of Petroleum Exporting Countries (OPEC) primarily from Caribbean and West European areas as petroleum products that were refined from crude oil produced by OPEC.

<sup>b</sup> Imports from the Neutral Zone between Kuwait and Saudi Arabia are included in imports from Saudi Arabia.

<sup>c</sup> On December 31, 1992, Ecuador withdrew as a member of OPEC. As of January 1, 1994, imports of petroleum from Ecuador appear under imports from Non-OPEC Sources.

<sup>d</sup> On December 31, 1994, Gabon withdrew as a member of OPEC. As of January 1, 1995, imports of petroleum from Gabon appear under imports from Non-OPEC Sources.

<sup>e</sup> Excludes petroleum imported into the United States indirectly from members of the Organization of Petroleum Exporting Countries (OPEC), primarily from Caribbean and West European areas, as petroleum products that were refined from crude oil produced by OPEC.

<sup>f</sup> Imports from other States in the former U.S.S.R. may be included in imports from Russia for the years 1981 through 1992.

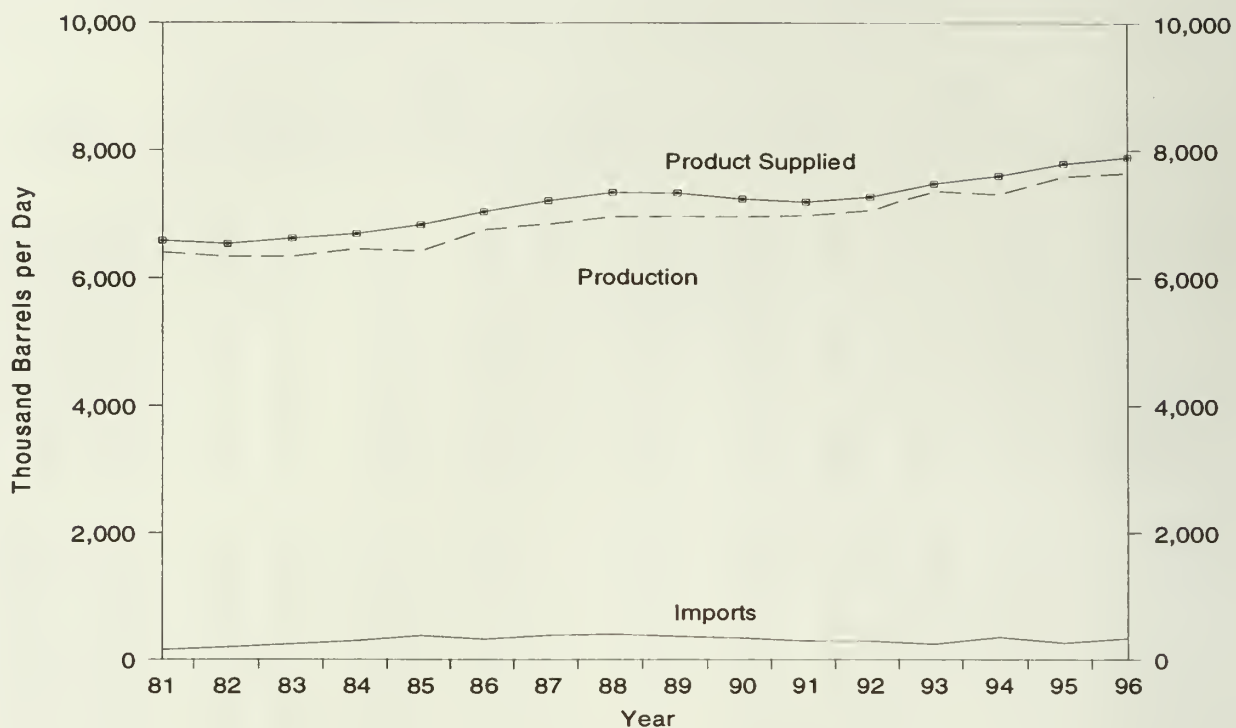
<sup>g</sup> A small amount of Iranian crude oil entered the United States in January 1988 from the Virgin Islands. This oil originated in Iran and was exported to the Virgin Islands prior to the signing of Executive Order 12613 on October 29, 1987.

(s) = Less than 500 barrels per day.

Notes: • Geographic coverage is the 50 States and the District of Columbia. • Totals may not equal sum of components due to independent rounding.

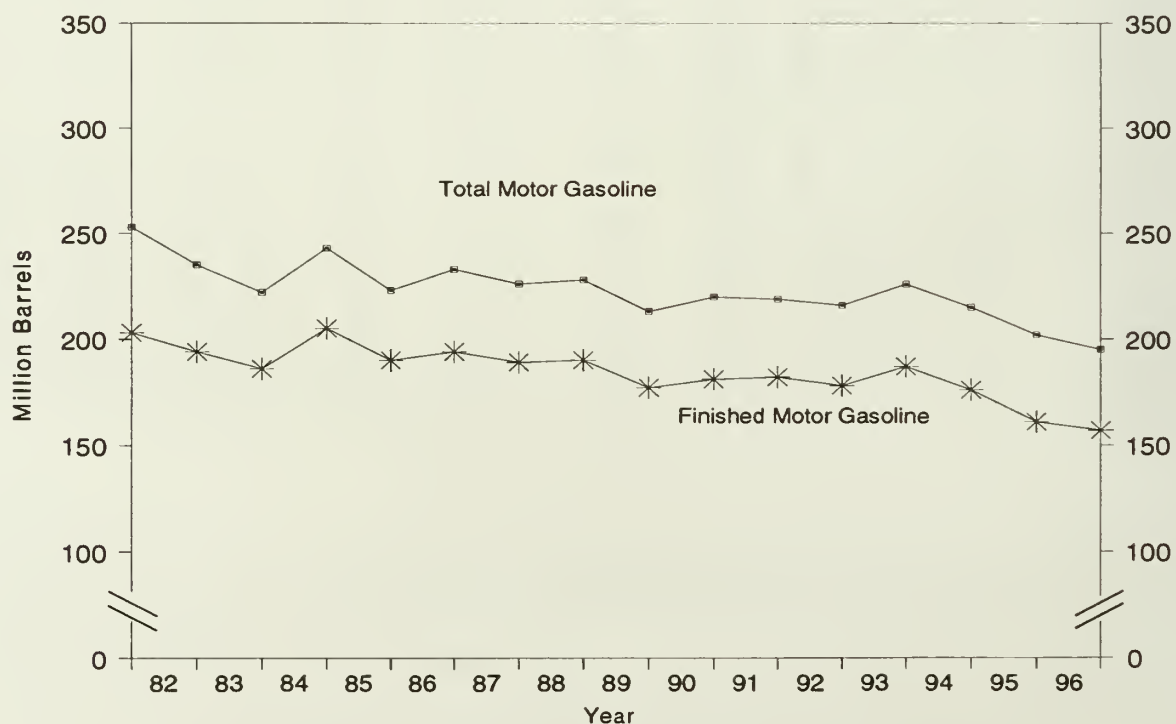
Source: See Summary Statistics Table and Figure Sources.

**Figure S5. Finished Motor Gasoline Supply and Disposition, 1981 - Present**



Source: Energy Information Administration, *Petroleum Supply Annual*, Table S4. See Summary Statistics Table and Figure Sources.

**Figure S6. Motor Gasoline Ending Stocks, 1981 - Present**



Note: Total motor gasoline includes motor gasoline blending components and finished motor gasoline.

Source: Energy Information Administration, *Petroleum Supply Annual*, Table S4. See Summary Statistics Table and Figure Sources.



**Table S4. Finished Motor Gasoline Supply and Disposition, 1981 - Present**  
(Thousand Barrels per Day, Except Where Noted)

Year/Month		Supply		Disposition			Ending Stocks <sup>a</sup> (Million Barrels)		Ending Stocks (Million Barrels)
		Total Production <sup>b</sup>	Imports <sup>c</sup>	Stock Change <sup>c,d</sup>	Exports	Product Supplied <sup>b</sup>	Motor Gasoline		Oxygenates
							Total <sup>e</sup>	Finished	
1981	Average .....	6,405	157	<sup>f</sup> -28	2	6,588	253	203	—
1982	Average .....	6,338	197	-25	20	6,539	<sup>f</sup> 235	<sup>f</sup> 194	—
1983	Average .....	6,340	247	<sup>f</sup> -45	10	6,622	222	186	—
1984	Average .....	6,453	299	54	6	6,693	243	205	—
1985	Average .....	6,419	381	-41	10	6,831	223	190	—
1986	Average .....	6,752	326	11	33	7,034	233	194	—
1987	Average .....	6,841	384	-15	35	7,206	226	189	—
1988	Average .....	6,956	405	3	22	7,336	228	190	—
1989	Average .....	6,963	369	-35	39	7,328	213	177	—
1990	Average .....	6,959	342	10	55	7,235	220	181	—
1991	Average .....	6,975	297	3	82	7,188	219	182	—
1992	Average .....	7,058	294	-11	96	7,268	216	178	—
1993	Average .....	7,360	247	26	105	7,476	226	187	13
1994	January .....	7,097	206	227	97	6,980	236	194	11
	February .....	6,790	281	-281	77	7,275	227	186	11
	March .....	6,760	382	-341	88	7,395	213	176	13
	April .....	7,195	467	26	73	7,564	213	176	15
	May .....	7,348	446	85	64	7,644	215	179	16
	June .....	7,455	483	-72	88	7,922	212	177	18
	July .....	7,380	455	-127	78	7,884	208	173	22
	August.....	7,432	439	-172	70	7,975	202	168	24
	September .....	7,385	360	55	74	7,615	205	169	25
	October .....	7,151	263	-244	110	7,548	201	162	23
	November .....	7,849	219	496	108	7,464	218	177	20
	December .....	7,867	265	-23	231	7,924	215	176	17
	Average .....	7,312	356	-31	97	7,601	—	—	—
1995	January .....	7,303	182	221	100	7,163	227	183	16
	February .....	7,243	223	-99	84	7,481	225	180	16
	March .....	7,168	336	-391	107	7,788	211	168	15
	April .....	7,529	235	-26	139	7,651	208	167	15
	May .....	7,678	286	3	67	7,894	208	167	15
	June .....	7,843	347	-122	91	8,220	205	163	14
	July .....	7,747	306	80	86	7,888	207	166	15
	August.....	7,642	280	-367	103	8,187	192	155	16
	September .....	7,785	238	143	94	7,786	199	159	15
	October .....	7,544	253	-106	121	7,781	197	156	14
	November .....	7,739	246	1	118	7,866	196	156	11
	December .....	7,821	244	182	141	7,742	202	161	12
	Average .....	7,588	265	-40	104	7,789	—	—	—
1996	January .....	7,370	303	240	163	7,271	215	169	12
	February .....	7,369	293	-10	72	7,599	214	168	12
	March .....	7,289	303	-327	128	7,792	203	158	13
	April .....	7,497	501	49	77	7,873	203	160	13
	May .....	7,804	414	66	81	8,071	205	162	12
	June .....	7,858	393	68	95	8,088	205	164	11
	July .....	7,924	359	-5	123	8,165	202	164	11
	August.....	7,796	346	-284	82	8,343	191	155	12
	September .....	7,606	339	215	68	7,662	200	161	11
	October .....	7,557	253	-396	113	8,093	189	149	11
	November .....	7,864	234	55	128	7,915	188	151	12
	December .....	7,815	298	202	117	7,794	195	157	13
	Average .....	7,647	336	-12	104	7,891	—	—	—

<sup>a</sup> Stocks are totals as of end of period.

<sup>b</sup> Beginning in 1993, motor gasoline production and product supplied includes blending of fuel ethanol and an adjustment to correct for the imbalance of motor gasoline blending components. Refer to Appendix B, Explanatory Note 10 for 1992 new basis product supplied.

<sup>c</sup> Beginning in 1981, excludes blending components.

<sup>d</sup> A negative number indicates a decrease in stocks and a positive number indicates an increase.

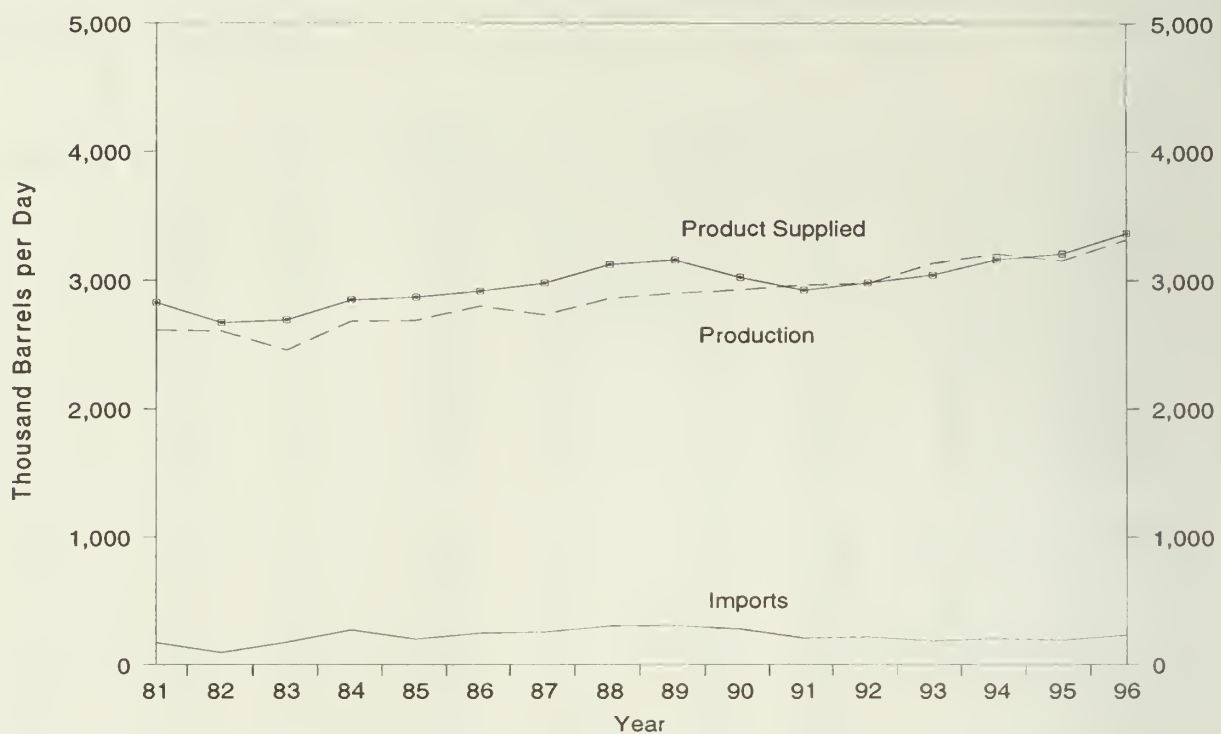
<sup>e</sup> Includes motor gasoline blending components but excludes stocks of oxygenates.

<sup>f</sup> In January 1981 and 1983, numerous respondents were added to surveys affecting stocks reported and stock change calculations. Stock changes are calculated using new basis stock levels. See Summary Statistics Explanatory Note 2.

Notes: • Geographic coverage is the 50 States and the District of Columbia. • Totals may not equal sum of components due to independent rounding.

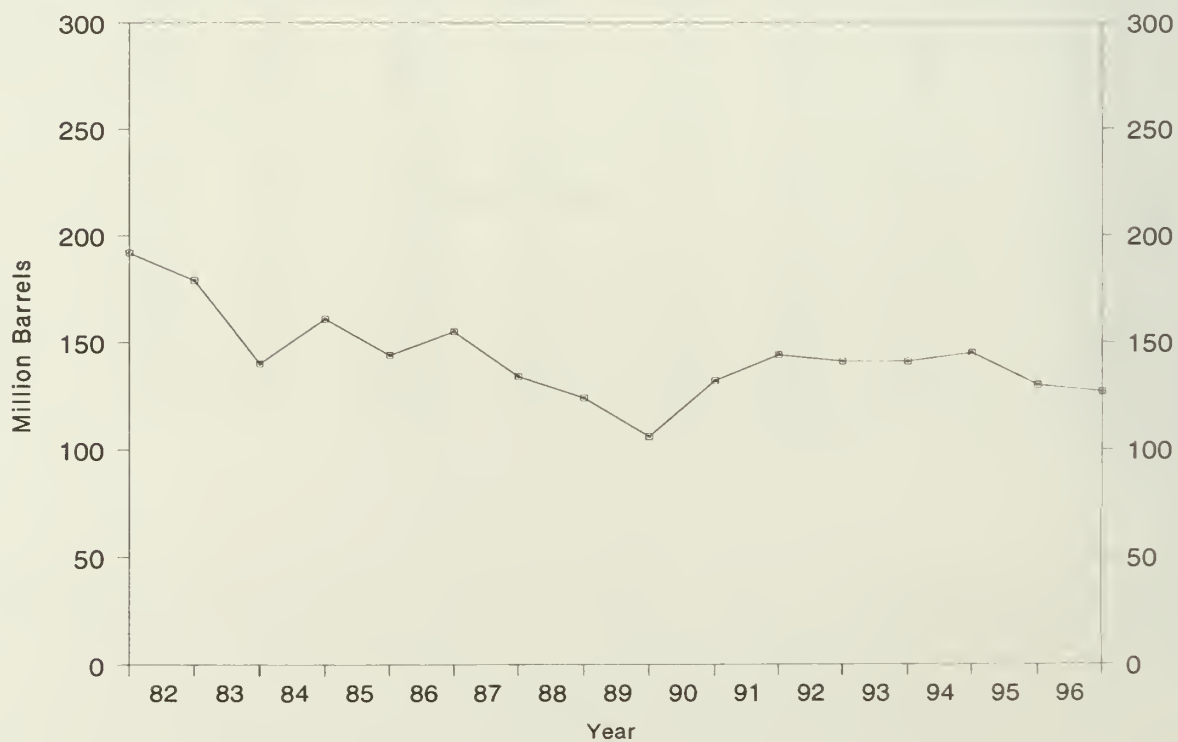
Source: See Summary Statistics Table and Figure Sources.

**Figure S7. Distillate Fuel Oil Supply and Disposition, 1981 - Present**



Source: Energy Information Administration, *Petroleum Supply Annual*, Table S5. See Summary Statistics Table and Figure Sources.

**Figure S8. Distillate Fuel Oil Ending Stocks, 1981 - Present**



Source: Energy Information Administration, *Petroleum Supply Annual*, Table S5. See Summary Statistics Table and Figure Sources.



**Table S5. Distillate Fuel Oil Supply and Disposition, 1981 - Present**  
(Thousand Barrels per Day, Except Where Noted)

Year/Month		Supply <sup>a</sup>		Disposition			Ending Stocks <sup>b</sup> (Million Barrels)		
		Total Production	Imports	Stock Change <sup>c</sup>	Exports	Product Supplied <sup>a</sup>	Total	0.05% Sulfur and Under	Greater than 0.05% Sulfur
1981	Average .....	2,613	173	<sup>d</sup> -38	5	2,829	192	-	-
1982	Average .....	2,606	93	-35	74	2,671	<sup>d</sup> 179	-	-
1983	Average .....	2,456	174	<sup>d</sup> -124	64	2,690	140	-	-
1984	Average .....	2,681	272	57	51	2,845	161	-	-
1985	Average .....	2,687	200	-48	67	2,868	144	-	-
1986	Average .....	2,798	247	31	100	2,914	155	-	-
1987	Average .....	2,731	255	-56	66	2,976	134	-	-
1988	Average .....	2,859	302	-30	69	3,122	124	-	-
1989	Average .....	2,899	306	-49	97	3,157	106	-	-
1990	Average .....	2,925	278	73	109	3,021	132	-	-
1991	Average .....	2,962	205	31	215	2,921	144	-	-
1992	Average .....	2,974	216	-8	219	2,979	141	-	-
1993	Average .....	3,132	184	1	274	3,041	141	64	77
1994	January .....	3,114	161	-754	332	3,698	117	55	62
	February .....	3,018	276	-521	235	3,581	103	49	54
	March .....	3,096	318	-113	220	3,307	99	51	49
	April .....	3,249	226	106	252	3,116	103	57	46
	May .....	3,317	202	318	289	2,912	112	61	51
	June .....	3,285	182	237	168	3,062	120	62	58
	July .....	3,191	164	472	220	2,663	134	69	65
	August .....	3,187	211	142	193	3,063	139	67	71
	September .....	3,285	193	205	140	3,133	145	66	78
	October .....	3,203	159	40	256	3,066	146	67	79
	November .....	3,270	166	45	211	3,180	147	70	77
	December .....	3,232	187	-68	284	3,203	145	73	73
	Average .....	3,205	203	12	234	3,162	-	-	-
1995	January .....	3,054	313	-163	141	3,389	140	70	70
	February .....	2,954	289	-645	212	3,675	122	63	59
	March .....	3,157	188	-216	216	3,344	115	59	56
	April .....	3,126	125	-27	172	3,106	115	62	53
	May .....	3,111	109	119	202	2,899	118	62	56
	June .....	3,109	176	-119	137	3,267	115	60	55
	July .....	3,056	157	333	148	2,732	125	62	63
	August .....	3,145	171	189	84	3,044	131	62	69
	September .....	3,287	142	28	116	3,285	132	64	68
	October .....	3,169	162	-11	238	3,104	131	61	70
	November .....	3,341	262	135	236	3,233	135	65	70
	December .....	3,344	235	-168	298	3,449	130	67	63
	Average .....	3,155	193	-41	183	3,207	-	-	-
1996	January .....	3,105	267	-528	216	3,684	114	58	55
	February .....	3,133	279	-570	256	3,727	97	53	44
	March .....	3,107	256	-247	139	3,471	90	49	40
	April .....	3,300	258	13	166	3,379	90	52	38
	May .....	3,256	231	182	176	3,128	96	57	39
	June .....	3,283	185	198	81	3,189	102	60	41
	July .....	3,127	194	166	134	3,021	107	62	45
	August .....	3,280	195	112	182	3,180	110	62	49
	September .....	3,392	193	157	256	3,172	115	64	51
	October .....	3,627	246	-8	300	3,581	115	60	54
	November .....	3,641	205	234	171	3,442	122	65	57
	December .....	3,536	253	160	206	3,422	127	68	58
	Average .....	3,316	230	-10	190	3,365	-	-	-

<sup>a</sup> Excludes 10,000 barrels per day in 1981 and 1982 previously published as crude used directly.

<sup>b</sup> Stocks are totals as of end of period.

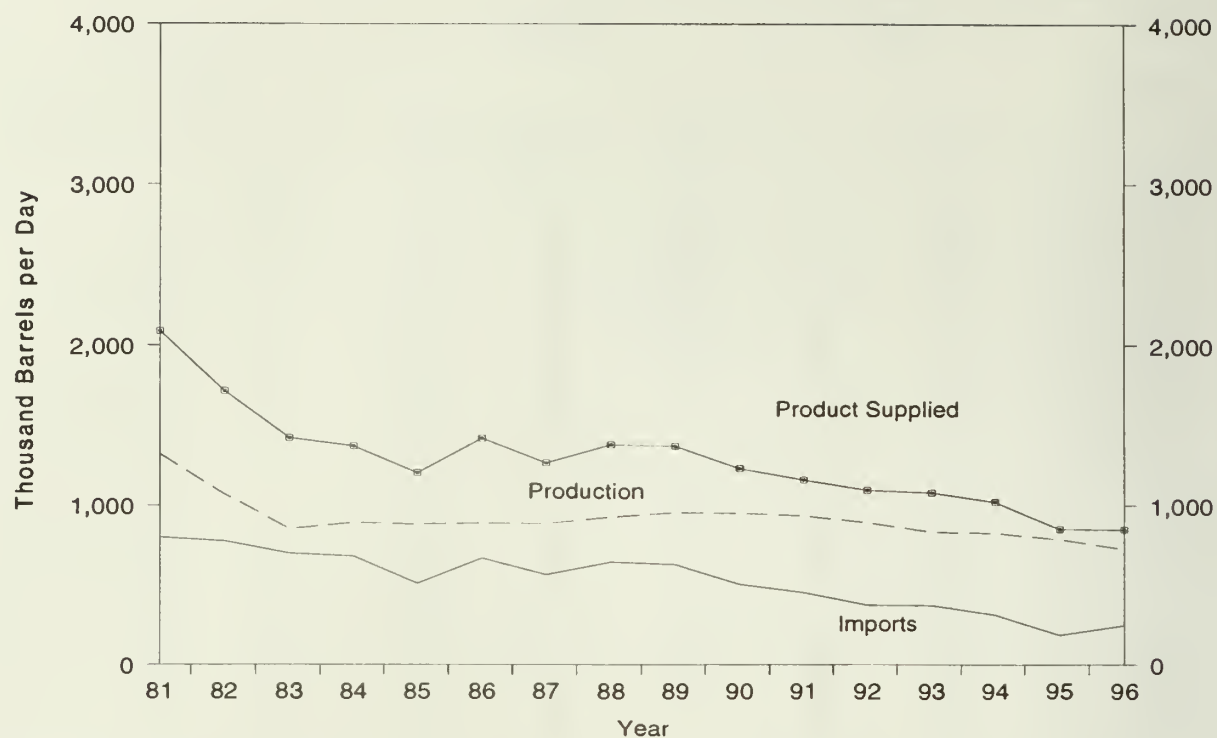
<sup>c</sup> A negative number indicates a decrease in stocks and a positive number indicates an increase.

<sup>d</sup> In January 1981 and 1983, numerous respondents were added to surveys affecting stocks reported and stock change calculations. Stock changes are calculated using new stock basis stock levels. See Summary Statistics Explanatory Note 2.

Notes: • Geographic coverage is the 50 States and the District of Columbia. • Totals may not equal sum of components due to independent rounding.

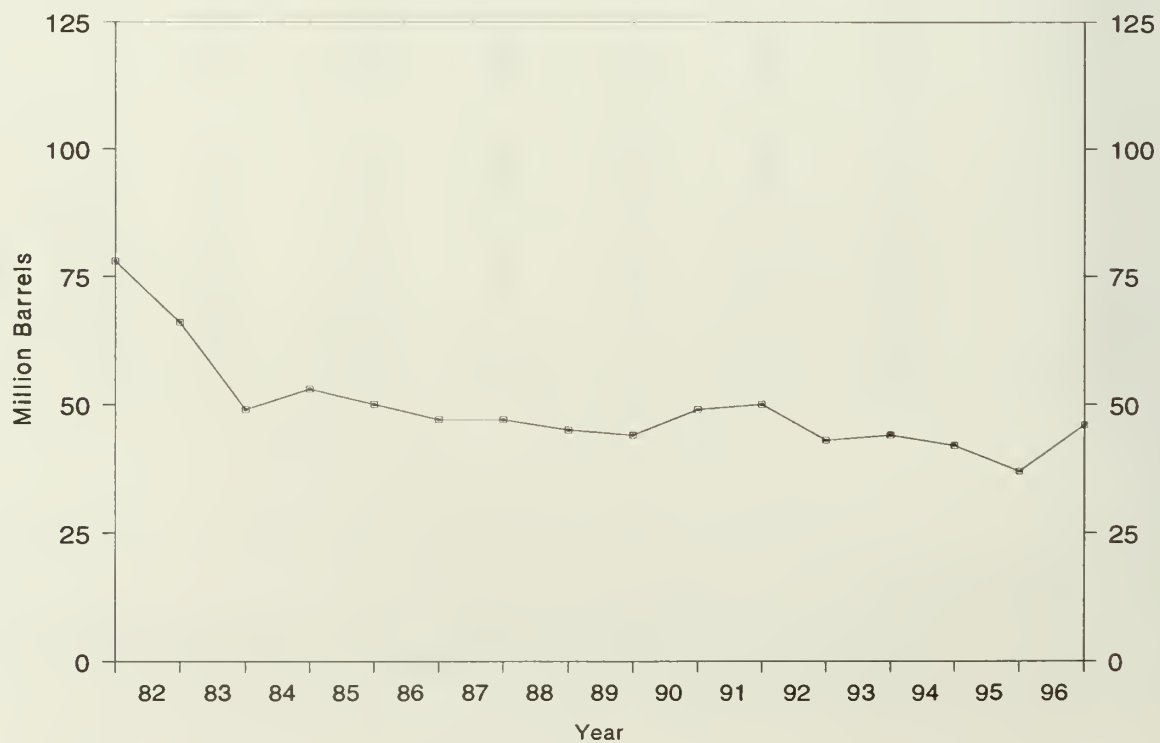
Source: See Summary Statistics Table and Figure Sources.

**Figure S9. Residual Fuel Oil Supply and Disposition, 1981 - Present**



Source: Energy Information Administration, *Petroleum Supply Annual*, Table S6. See Summary Statistics Table and Figure Sources.

**Figure S10. Residual Fuel Oil Ending Stocks, 1981 - Present**



Source: Energy Information Administration, *Petroleum Supply Annual*, Table S6. See Summary Statistics Table and Figure Sources.



**Table S6. Residual Fuel Oil Supply and Disposition, 1981 - Present**  
(Thousand Barrels per Day, Except Where Noted)

Year/Month		Supply <sup>a</sup>		Disposition			Ending Stocks <sup>c</sup> (Million Barrels)
		Total Production	Imports	Stock Change <sup>b</sup>	Exports	Product Supplied <sup>a</sup>	
1981	Average .....	1,321	800	<sup>d</sup> -37	118	2,088	78
1982	Average .....	1,070	776	-32	209	1,716	<sup>d</sup> 66
1983	Average .....	852	699	<sup>d</sup> -55	185	1,421	49
1984	Average .....	891	681	12	190	1,369	53
1985	Average .....	882	510	-7	197	1,202	50
1986	Average .....	889	669	-8	147	1,418	47
1987	Average .....	885	565	(s)	186	1,264	47
1988	Average .....	926	644	-8	200	1,378	45
1989	Average .....	954	629	-2	215	1,370	44
1990	Average .....	950	504	13	211	1,229	49
1991	Average .....	934	453	4	226	1,158	50
1992	Average .....	892	375	-20	193	1,094	43
1993	Average .....	835	373	4	123	1,080	44
1994	January .....	809	532	4	64	1,272	44
	February .....	852	597	-159	127	1,481	40
	March .....	859	426	61	175	1,050	42
	April .....	846	282	-65	110	1,083	40
	May .....	860	348	30	129	1,049	41
	June .....	779	247	-43	122	948	39
	July .....	807	230	12	83	941	40
	August .....	838	287	37	120	968	41
	September .....	800	222	117	141	764	44
	October .....	755	190	-45	134	856	43
	November .....	835	248	19	182	881	44
	December .....	871	173	-58	115	988	42
	Average .....	826	314	-6	125	1,021	-
1995	January .....	903	204	56	203	848	44
	February .....	776	225	-246	208	1,040	37
	March .....	778	209	35	154	798	38
	April .....	789	128	-22	129	810	37
	May .....	748	177	48	115	762	39
	June .....	746	184	-87	120	896	36
	July .....	797	149	27	164	755	37
	August .....	801	177	36	122	820	38
	September .....	811	220	58	124	848	40
	October .....	724	131	-55	84	825	38
	November .....	705	182	-17	111	793	37
	December .....	874	257	-8	98	1,040	37
	Average .....	788	187	-13	136	852	-
1996	January .....	799	320	-54	108	1,064	36
	February .....	798	222	-132	114	1,038	32
	March .....	700	227	-4	95	836	32
	April .....	671	237	69	96	743	34
	May .....	732	203	18	89	827	34
	June .....	731	168	21	144	735	35
	July .....	646	335	-3	88	896	35
	August .....	732	227	32	56	871	36
	September .....	713	197	68	125	717	38
	October .....	694	260	16	104	835	38
	November .....	714	270	139	101	744	42
	December .....	778	307	112	102	872	46
	Average .....	726	248	24	102	848	-

<sup>a</sup> Excludes 48,000 barrels per day in 1981 and 1982 previously published as crude used directly.

<sup>b</sup> A negative number indicates a decrease in stocks and a positive number indicates an increase.

<sup>c</sup> Stocks are totals as of end of period.

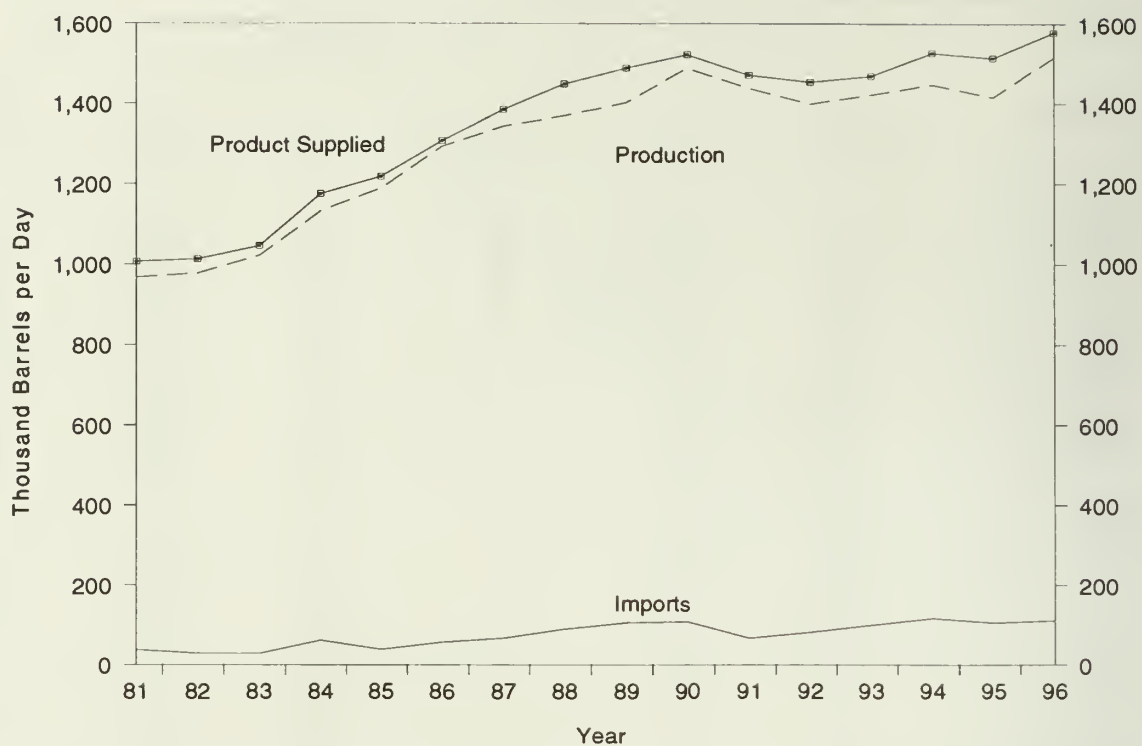
<sup>d</sup> In January 1981 and 1983, numerous respondents were added to surveys affecting stocks reported and stock change calculations. Stock changes are calculated using new basis stock levels. See Summary Statistics Explanatory Note 2.

(s)=Less than 500 barrels per day.

Notes: • Geographic coverage is the 50 States and the District of Columbia. • Totals may not equal sum of components due to independent rounding.

Source: See Summary Statistics Table and Figure Sources.

Figure S11. Jet Fuel Supply and Disposition, 1981 - Present



Source: Energy Information Administration, *Petroleum Supply Annual*, Table S7. See Summary Statistics Table and Figure Sources.

Figure S12. Jet Fuel Ending Stocks, 1981 - Present



Source: Energy Information Administration, *Petroleum Supply Annual*, Table S7. See Summary Statistics Table and Figure Sources.



**Table S7. Jet Fuel Supply and Disposition, 1981 - Present**  
(Thousand Barrels per Day, Except Where Noted)

Year/Month		Supply			Disposition				Ending Stocks <sup>a</sup> (Million Barrels)	
		Production		Imports	Stock Change <sup>b</sup>	Exports	Product Supplied		Total	Kerosene Type
		Total	Kerosene-Type				Total	Kerosene-Type		
1981	Average .....	968	775	38	<sup>c</sup> -4	2	1,007	809	41	34
1982	Average .....	978	778	29	-12	6	1,013	804	<sup>c</sup> 37	<sup>c</sup> 31
1983	Average .....	1,022	817	29	<sup>c</sup> (s)	6	1,046	839	39	32
1984	Average .....	1,132	919	62	9	9	1,175	953	42	35
1985	Average .....	1,189	983	39	-4	13	1,218	1,005	40	34
1986	Average .....	1,293	1,097	57	25	18	1,307	1,105	50	43
1987	Average .....	1,343	1,138	67	(s)	24	1,385	1,181	50	42
1988	Average .....	1,370	1,164	90	-17	28	1,449	1,236	44	38
1989	Average .....	1,403	1,197	106	-8	27	1,489	1,284	41	34
1990	Average .....	1,488	1,311	108	31	43	1,522	1,340	52	46
1991	Average .....	1,438	1,274	67	-9	43	1,471	1,296	49	44
1992	Average .....	1,399	1,254	82	-16	43	1,454	1,310	43	39
1993	Average .....	1,422	1,309	100	-7	59	1,469	1,357	40	38
1994	January .....	1,456	1,394	116	29	40	1,504	1,460	41	39
	February .....	1,374	1,331	138	-43	35	1,519	1,473	40	38
	March .....	1,322	1,272	120	-80	14	1,507	1,444	38	36
	April .....	1,437	1,395	138	20	12	1,544	1,469	38	36
	May .....	1,451	1,403	112	108	9	1,446	1,402	42	40
	June .....	1,451	1,400	130	-2	11	1,573	1,518	41	40
	July .....	1,472	1,422	98	34	11	1,526	1,456	43	41
	August .....	1,538	1,498	91	33	10	1,585	1,536	44	42
	September .....	1,444	1,419	149	47	31	1,515	1,461	45	44
	October .....	1,434	1,409	110	-27	18	1,552	1,520	44	43
	November .....	1,442	1,433	93	(s)	19	1,515	1,494	44	43
	December .....	1,543	1,533	114	86	33	1,538	1,526	47	46
	Average .....	1,448	1,410	117	18	20	1,527	1,480	--	--
1995	January .....	1,412	1,402	79	-84	33	1,542	1,525	44	43
	February .....	1,375	1,366	123	-43	21	1,520	1,514	43	42
	March .....	1,281	1,272	99	-115	17	1,478	1,464	39	39
	April .....	1,326	1,317	82	-12	5	1,414	1,402	39	38
	May .....	1,367	1,354	104	-35	18	1,487	1,478	38	37
	June .....	1,412	1,398	99	67	11	1,433	1,393	40	39
	July .....	1,458	1,444	97	23	27	1,505	1,469	41	40
	August .....	1,427	1,418	82	-23	21	1,511	1,505	40	39
	September .....	1,465	1,459	155	44	20	1,557	1,500	41	41
	October .....	1,426	1,422	99	-54	57	1,521	1,518	40	39
	November .....	1,496	1,493	164	64	13	1,584	1,578	42	41
	December .....	1,542	1,538	89	-51	63	1,619	1,618	40	39
	Average .....	1,416	1,407	106	-19	26	1,514	1,497	--	--
1996	January .....	1,596	1,593	89	-49	111	1,624	1,607	38	38
	February .....	1,499	1,495	100	-129	67	1,661	1,658	35	35
	March .....	1,470	1,468	105	-24	59	1,541	1,547	34	34
	April .....	1,466	1,464	113	51	11	1,517	1,515	36	35
	May .....	1,419	1,418	122	39	13	1,489	1,467	37	37
	June .....	1,514	1,512	127	71	11	1,558	1,556	39	39
	July .....	1,496	1,493	89	-14	27	1,572	1,569	38	38
	August .....	1,510	1,507	104	-2	34	1,582	1,580	38	38
	September .....	1,650	1,647	159	152	51	1,606	1,604	43	43
	October .....	1,485	1,484	126	-55	35	1,631	1,636	41	41
	November .....	1,501	1,500	87	-45	45	1,588	1,588	40	40
	December .....	1,575	1,574	110	(s)	115	1,570	1,573	40	40
	Average .....	1,515	1,513	111	(s)	48	1,578	1,575	--	--

<sup>a</sup> Stocks are totals as of end of period.

<sup>b</sup> A negative number indicates a decrease in stocks and a positive number indicates an increase.

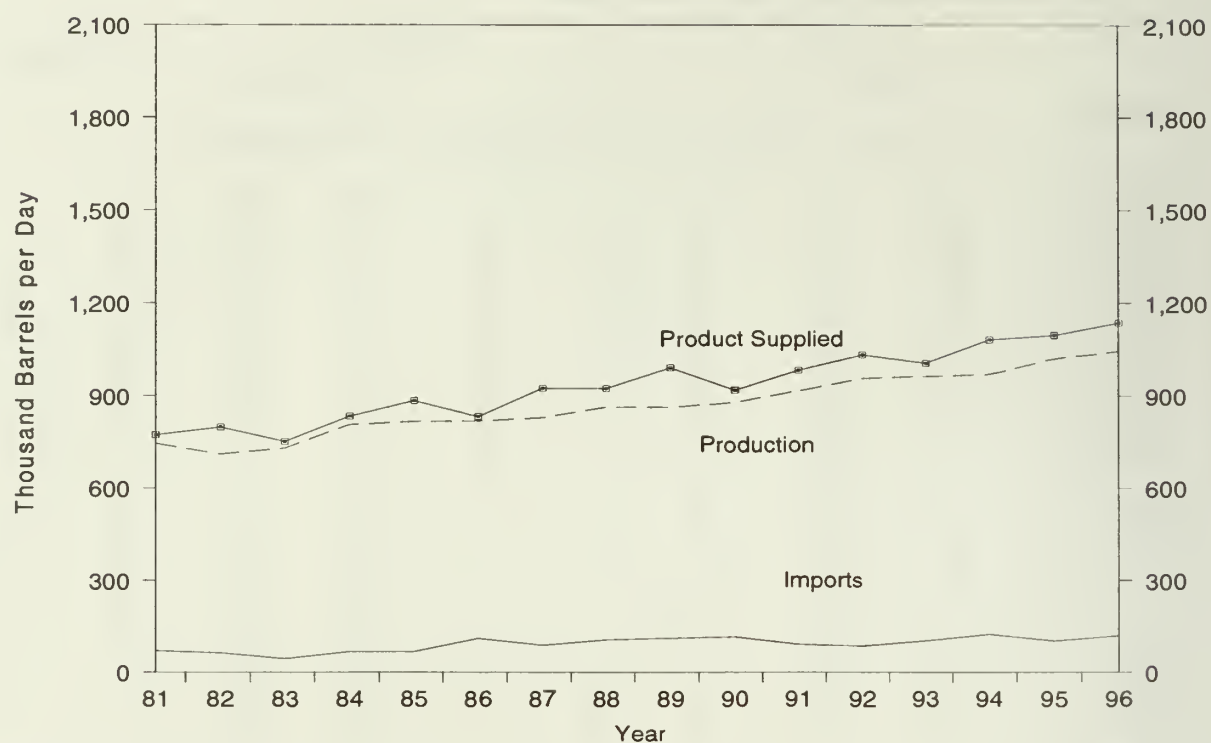
<sup>c</sup> In January 1981, and 1983, a new stock basis was established affecting stocks reported and stock change calculations. Stock changes are calculated using new basis stock levels. See Summary Statistics Explanatory Note 2.

(s) = Less than 500 barrels per day.

Notes: • Geographic coverage is the 50 States and the District of Columbia. • Totals may not equal sum of components due to independent rounding.

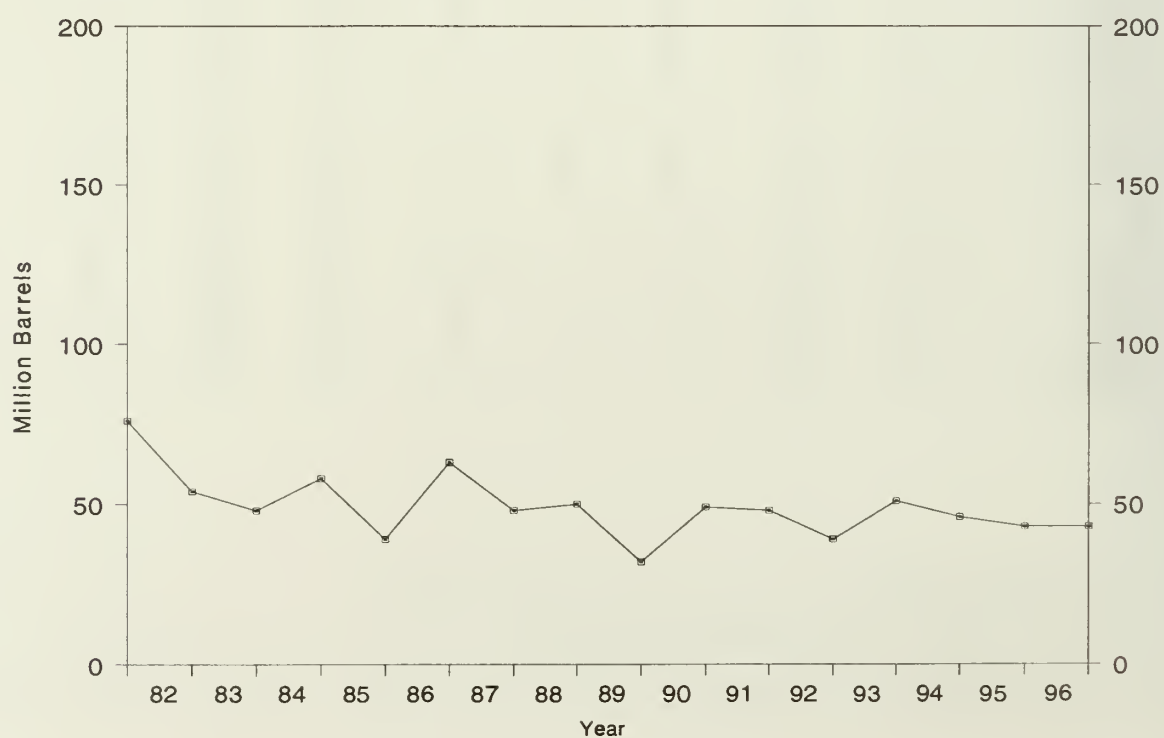
Source: See Summary Statistics Table and Figure Sources.

Figure S13. Propane/Propylene Supply and Disposition, 1981 - Present



Source: Energy Information Administration, *Petroleum Supply Annual*, Table S8. See Summary Statistics Table and Figure Sources.

Figure S14. Propane/Propylene Ending Stocks, 1981 - Present



Source: Energy Information Administration, *Petroleum Supply Annual*, Table S8. See Summary Statistics Table and Figure Sources.



**Table S8. Propane/Propylene Supply and Disposition, 1981 - Present**  
(Thousand Barrels per Day, Except Where Noted)

Year/Month	Supply		Disposition				Ending Stocks <sup>b</sup> (Million Barrels)
	Total Production	Imports	Stock Change <sup>a</sup>	Refinery Inputs	Exports	Product Supplied	
1981 Average .....	745	70	<sup>c</sup> 18	5	18	773	76
1982 Average .....	711	63	-59	4	31	798	<sup>c</sup> 54
1983 Average .....	730	44	<sup>c</sup> -24	4	43	751	<sup>c</sup> 48
1984 Average .....	806	67	<sup>c</sup> 7	4	30	833	58
1985 Average .....	816	67	-50	3	48	883	39
1986 Average .....	817	110	64	4	28	831	63
1987 Average .....	828	88	-41	8	24	924	48
1988 Average .....	863	106	7	8	31	923	50
1989 Average .....	862	111	-52	11	24	990	32
1990 Average .....	878	115	48	(s)	28	917	49
1991 Average .....	915	91	-3	(s)	28	982	48
1992 Average .....	956	85	-24	(s)	33	1,032	39
1993 Average .....	963	103	34	(s)	26	1,006	51
1994 January .....	889	141	-566	0	19	1,577	34
February .....	905	128	-308	0	30	1,311	25
March .....	939	87	13	0	29	984	25
April .....	978	83	188	0	20	852	31
May .....	976	90	306	0	20	741	41
June .....	978	117	247	0	20	827	48
July .....	977	151	221	0	22	885	55
August .....	980	135	107	0	28	980	58
September .....	1,008	133	77	0	20	1,044	60
October .....	954	164	-175	0	24	1,269	55
November .....	1,002	137	-43	0	27	1,155	54
December .....	1,034	127	-233	0	29	1,366	46
Average .....	969	124	-13	0	24	1,082	--
1995 January .....	1,007	108	-349	0	55	1,409	36
February .....	985	94	-362	0	100	1,341	26
March .....	1,017	90	14	0	39	1,055	26
April .....	1,040	107	157	0	31	958	31
May .....	1,046	73	209	0	29	882	37
June .....	1,042	114	188	0	27	941	43
July .....	1,011	75	236	0	27	823	50
August .....	1,008	107	187	0	24	905	56
September .....	1,022	146	45	0	25	1,098	57
October .....	999	98	-22	0	30	1,090	57
November .....	1,045	76	-160	0	37	1,243	52
December .....	1,033	135	-285	0	31	1,422	43
Average .....	1,021	102	-10	0	38	1,096	--
1996 January .....	995	151	-353	0	30	1,468	32
February .....	1,001	106	-347	0	39	1,415	22
March .....	1,043	116	-1	0	25	1,135	22
April .....	1,047	78	114	0	31	981	25
May .....	1,048	104	209	0	21	922	32
June .....	1,031	122	293	0	21	839	41
July .....	1,043	114	188	0	29	940	46
August .....	1,051	126	83	0	24	1,069	49
September .....	1,057	95	97	0	21	1,034	52
October .....	1,058	151	-37	0	29	1,218	51
November .....	1,063	147	-148	0	34	1,324	46
December .....	1,093	122	-106	0	31	1,289	43
Average .....	1,044	119	(s)	0	28	1,136	--

<sup>a</sup> A negative number indicates a decrease in stocks and a positive number indicates an increase.

<sup>b</sup> Stocks are totals as of end of period.

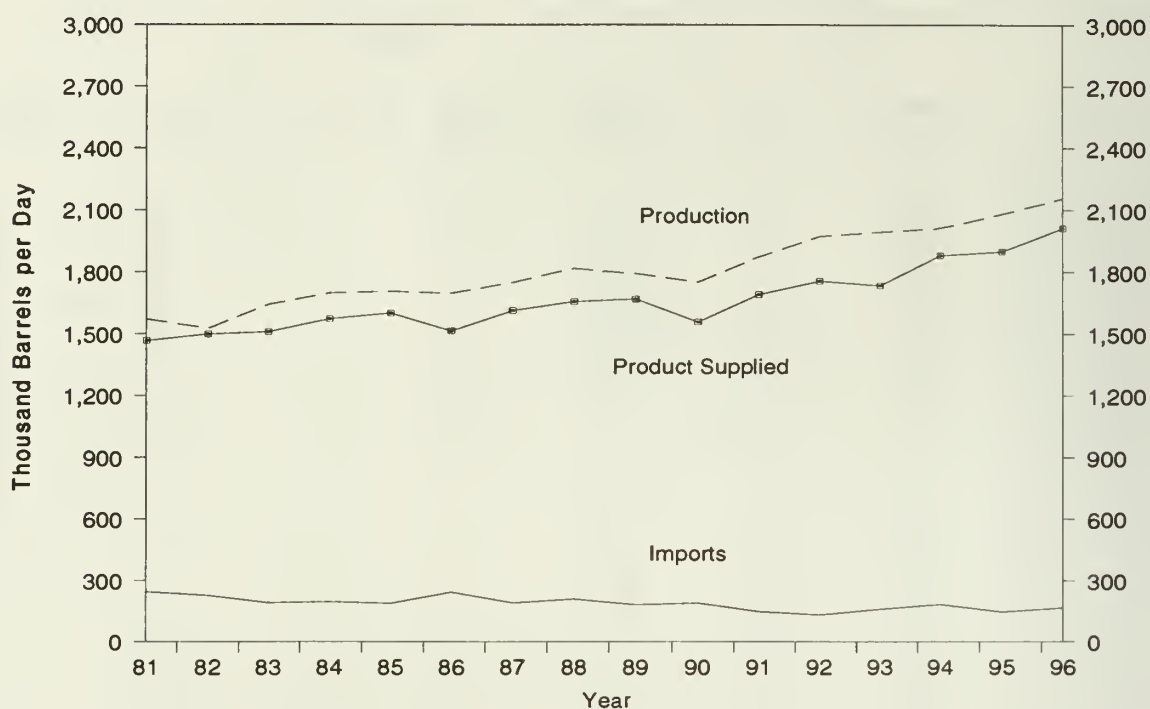
<sup>c</sup> In January 1981, 1983, and 1984, a new stock basis was established affecting stocks reported and stock change calculations. Stock changes are calculated using new basis stock levels. See Summary Statistics Explanatory Note 2.

(s) = Less than 500 barrels per day.

Notes: • Geographic coverage is the 50 States and the District of Columbia. • Totals may not equal sum of components due to independent rounding.

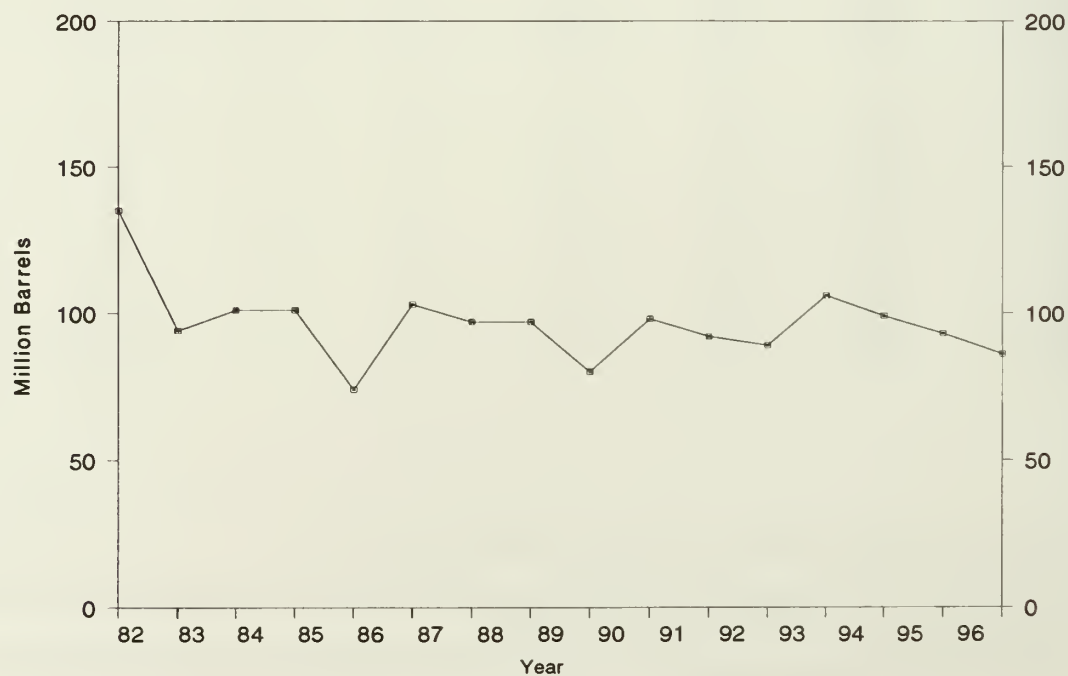
Source: See Summary Statistics Table and Figure Sources.

**Figure S15. Liquefied Petroleum Gases Supply and Disposition, 1981 - Present**



Source: Energy Information Administration, *Petroleum Supply Annual*, Table S9. See Summary Statistics Table and Figure Sources.

**Figure S16. Liquefied Petroleum Gases Ending Stocks, 1981 - Present**



Source: Energy Information Administration, *Petroleum Supply Annual*, Table S9. See Summary Statistics Table and Figure Sources.



**Table S9. Liquefied Petroleum Gases Supply and Disposition, 1981 - Present**  
(Thousand Barrels per Day, Except Where Noted)

Year/Month		Supply		Disposition			Ending Stocks <sup>b</sup> (Million Barrels)
		Total Production	Imports	Stock Change <sup>a</sup>	Refinery Inputs	Exports	
1981	Average .....	1,571	244	<sup>c</sup> 18	289	42	1,466
1982	Average .....	1,528	226	-111	300	65	1,499
1983	Average .....	1,642	190	<sup>c</sup> -4	253	73	1,509
1984	Average .....	1,697	195	<sup>c</sup> -19	291	48	1,572
1985	Average .....	1,704	187	-75	304	62	1,599
1986	Average .....	1,695	242	80	302	42	1,512
1987	Average .....	1,748	190	-15	304	38	1,612
1988	Average .....	1,817	209	1	321	49	1,656
1989	Average .....	1,791	181	-47	315	35	1,668
1990	Average .....	1,749	188	48	293	40	1,556
1991	Average .....	1,871	147	-15	304	41	1,689
1992	Average .....	1,972	131	-10	309	49	1,755
1993	Average .....	1,993	160	49	327	43	1,734
1994	January .....	1,717	194	-923	396	28	2,410
	February .....	1,807	192	-463	343	44	2,075
	March .....	1,969	146	42	232	37	1,804
	April .....	2,093	116	323	218	29	1,639
	May .....	2,120	135	478	243	32	1,503
	June .....	2,156	178	480	251	41	1,562
	July .....	2,169	229	353	246	40	1,759
	August .....	2,170	198	296	236	37	1,799
	September .....	2,073	206	104	264	56	1,854
	October .....	1,926	230	-259	322	40	2,054
	November .....	1,927	199	-228	401	35	1,919
	December .....	1,998	169	-452	399	41	2,179
	Average .....	2,012	183	-19	296	38	1,880
1995	January .....	1,952	172	-527	363	64	2,225
	February .....	1,969	134	-463	306	122	2,138
	March .....	2,126	111	170	247	57	1,763
	April .....	2,259	147	307	216	43	1,841
	May .....	2,269	115	403	211	62	1,709
	June .....	2,233	174	448	198	55	1,705
	July .....	2,203	124	488	217	41	1,581
	August .....	2,178	169	343	217	57	1,730
	September .....	2,038	195	14	300	29	1,890
	October .....	1,940	130	-245	358	35	1,921
	November .....	1,943	115	-500	407	63	2,087
	December .....	1,865	169	-680	424	67	2,223
	Average .....	2,082	146	-17	289	58	1,899
1996	January .....	1,906	208	-649	419	49	2,295
	February .....	1,912	138	-596	320	60	2,267
	March .....	2,181	165	15	246	38	2,047
	April .....	2,305	122	279	226	56	1,867
	May .....	2,287	156	315	215	67	1,846
	June .....	2,285	184	439	211	36	1,783
	July .....	2,264	182	385	201	72	1,787
	August .....	2,271	166	321	201	50	1,864
	September .....	2,194	150	165	260	47	1,871
	October .....	2,133	183	-103	309	37	2,073
	November .....	2,041	177	-466	377	41	2,265
	December .....	2,086	159	-352	355	56	2,186
	Average .....	2,156	166	-19	278	51	2,012

<sup>a</sup> A negative number indicates a decrease in stocks and a positive number indicates an increase.

<sup>b</sup> Stocks are totals as of end of period.

<sup>c</sup> In January 1981, 1983, and 1984, a new stock basis was established affecting stocks reported and stock change calculations. Stock changes are calculated using new basis stock levels. See Summary Statistics Explanatory Note 2.

Notes: • Liquefied petroleum gases includes ethane/ethylene, propane/propylene, normal butane/butylene, and isobutane/isobutylene. Beginning in January 1984, unfractionated stream is reported by individual product. • Geographic coverage is the 50 States and the District of Columbia. • Totals may not equal sum of components due to independent rounding.

Source: See Summary Statistics Table and Figure Sources.

**Table S10. Other Petroleum Products Supply and Disposition, 1981 - Present**  
(Thousand Barrels per Day, Except Where Noted)

Year/Month		Supply		Disposition				Ending Stocks <sup>b</sup> (Million Barrels)
		Total Production	Imports	Stock Change <sup>a</sup>	Refinery Inputs	Exports	Products Supplied	
1981	Average .....	2,771	188	<sup>c</sup> -42	723	197	2,081	241
1982	Average .....	2,475	305	-68	787	205	1,856	<sup>c</sup> 216
1983	Average .....	2,437	382	<sup>c</sup> -6	712	236	1,877	<sup>c</sup> 217
1984	Average .....	2,500	503	<sup>c</sup> -32	791	236	2,007	198
1985	Average .....	2,532	550	22	886	227	1,947	206
1986	Average .....	2,704	504	-15	888	291	2,045	201
1987	Average .....	2,737	543	-1	829	264	2,187	200
1988	Average .....	2,773	645	22	799	294	2,303	208
1989	Average .....	2,771	627	12	797	305	2,285	213
1990	Average .....	2,842	705	-32	887	289	2,402	201
1991	Average .....	2,826	675	18	936	277	2,269	208
1992	Average .....	2,928	707	-3	906	263	2,470	<sup>c</sup> 207
1993	Average .....	3,035	770	-2	1,081	300	2,426	206
1994	January .....	2,712	838	<sup>c</sup> 511	585	256	2,198	222
	February .....	2,790	743	277	613	248	2,394	229
	March .....	2,777	810	52	934	361	2,241	231
	April .....	2,914	783	-126	1,016	272	2,534	227
	May .....	3,078	773	-64	1,009	288	2,617	225
	June .....	3,131	726	-103	887	331	2,742	222
	July .....	3,158	746	80	759	361	2,704	225
	August .....	3,093	797	-46	803	411	2,721	223
	September .....	3,088	695	50	745	388	2,600	225
	October .....	3,067	700	-72	902	300	2,636	223
	November .....	3,001	749	47	1,013	344	2,347	224
	December .....	2,852	762	-298	1,049	386	2,478	215
	Average .....	2,973	761	24	861	329	2,518	-
1995	January .....	2,879	559	413	657	324	2,044	227
	February .....	2,960	806	271	758	320	2,417	235
	March .....	2,842	672	-35	914	329	2,306	234
	April .....	2,916	711	-106	1,064	355	2,313	231
	May .....	3,009	593	-74	801	339	2,535	229
	June .....	3,142	651	-130	917	403	2,604	225
	July .....	3,312	765	-54	1,126	326	2,679	223
	August .....	3,246	745	-250	1,123	372	2,746	215
	September .....	3,256	779	-44	1,077	348	2,654	214
	October .....	2,939	727	-120	919	376	2,491	210
	November .....	2,918	803	-35	1,003	343	2,409	209
	December .....	2,953	701	-97	1,125	341	2,286	206
	Average .....	3,031	708	-23	958	348	2,457	-
1996	January .....	2,833	873	448	613	335	2,311	220
	February .....	2,817	745	-18	872	388	2,320	219
	March .....	2,983	820	122	759	315	2,607	223
	April .....	3,108	828	174	841	421	2,500	228
	May .....	3,128	852	-45	1,010	427	2,588	227
	June .....	3,227	923	-203	1,207	399	2,748	221
	July .....	3,223	862	-170	1,131	361	2,764	216
	August .....	3,332	907	-311	1,289	448	2,812	206
	September .....	3,306	751	-56	1,083	410	2,620	204
	October .....	3,146	1,068	-84	1,023	323	2,952	202
	November .....	3,093	928	-34	1,113	366	2,576	201
	December .....	3,088	982	42	1,224	321	2,485	202
	Average .....	3,108	879	-11	1,014	376	2,608	-

<sup>a</sup> A negative number indicates a decrease in stocks and a positive number indicates an increase.

<sup>b</sup> Stocks are totals as of end of period.

<sup>c</sup> In January 1981, 1983, and 1984, a new stock basis was established affecting stocks reported and stock change calculations. Stock changes are calculated using new basis stock levels. Bulk terminal and pipeline stocks of oxygenates were added beginning in January 1993. See Summary Statistics Explanatory Note 2.

Notes: • Other petroleum products includes pentanes plus, other hydrocarbons and oxygenates, unfinished oils, gasoline blending components and all finished petroleum products except finished motor gasoline, distillate fuel oil, residual fuel oil, jet fuel, and liquefied petroleum gases, and crude oil product supplied. • Geographic coverage is the 50 States and the District of Columbia. • Totals may not equal sum of components due to independent rounding.

Source: See Summary Statistics Table and Figure Sources.



# Summary Statistics Tables and Figures Sources

Information about petroleum supply and disposition at the National level are presented in the Summary Statistics tables. Industry terminology and product definitions are listed alphabetically in the Glossary.

The data presented in these tables are from several sources and represent different levels of timeliness and data finality.

- U.S. Department of Energy, Energy Information Administration (EIA), *Petroleum Supply Annual* (1981 through 1996).
- Data on crude oil production are reported to the EIA by State government agencies. Data on crude oil production

for Federal offshore areas are reported to the EIA by the Minerals Management Service of the U.S. Department of the Interior and the Conservation Committee of California Oil Producers. Crude oil production data for 1996 reflect data received as of May 1997. Data for 1996 received after May will be published as an appendix in the following year's *Petroleum Supply Annual*.

- Data on exports of crude oil and petroleum products are received from the U.S. Bureau of the Census. Export statistics reflect exports of domestic and foreign merchandise from the United States (the 50 States and the District of Columbia) to foreign countries and U.S. possessions.

# Summary Statistics Explanatory Notes

The following notes are provided to assist in understanding and interpreting the data presented in the Summary Statistics section of this publication.

## Note 1. Domestic Crude Oil Production

The Energy Information Administration (EIA) collects monthly crude oil production data on an ongoing basis. Data on crude oil production for States are reported to the EIA by State government agencies. Data on crude oil production for Federal offshore areas are reported to the EIA by the Minerals Management Service of the U.S. Department of the Interior and the Conservation Committee of California Oil and Gas Producers.

Currently, all except four crude oil producing States (Michigan, New York, Ohio, and Pennsylvania) report production on a monthly basis. These four States report crude oil on an annual basis. Estimates of monthly crude oil production for these four States are made by the EIA using data reported on Form EIA-182, "Domestic Crude Oil First Purchase Report."

After the end of each calendar year, the monthly crude oil production estimates are updated using annual reports from various State agencies, the Mineral Management Service, and the Conservation Committee of California Oil and Gas Producers. The EIA incorporates production data into its Crude Oil Production System (COPS) as the data are received from the reporting agencies. Tables S1 and S2 present the 1996 crude oil production data received by the EIA as of May 1997. Crude oil production data for 1996 received after May 1997 will be published later as an appendix in the following year's *Petroleum Supply Annual* (PSA). Table C1 of this publication presents the 1995 crude oil production a year after it was published in the PSA 1995.

## Note 2. Frames Maintenance

In January 1981 and 1983, numerous respondents were added to bulk terminal and pipeline surveys affecting subsequent stocks reported and stock change calculations. Using the expanded coverage (new basis), the end-of-year stocks, in million barrels, would have been as listed below.

- Crude Oil: 1982- 645 (Total) and 351 (Other Primary).
- Crude Oil and Petroleum Products: 1980- 1,425; and 1982- 1,461.
- Motor Gasoline: 1980- 263 (Total) and 214 (Finished); 1982- 244 (Total) and 202 (Finished).
- Distillate Fuel Oil: 1980- 205; and 1982- 186.

- Residual Fuel Oil: 1980- 91; and 1982- 69.
- Jet Fuel: 1980- 42 (Total) and 36 (Kerosene-type); and 1982-39 (Total) and 32 (Kerosene-type).
- Propane/Propylene: 1980- 69; and 1982- 57.
- Liquefied Petroleum Gases: 1980- 128; and 1982- 102.
- Other Petroleum Products: 1980- 207; and 1982- 219.

Stock change calculations beginning in 1981 and 1983 were made using new basis stock levels.

Stocks of Alaskan crude oil in-transit were included for the first time in January 1981. The major impact of this change is on the reporting of stock change calculations. Using the expanded coverage (new basis), 1980 end-of-year crude oil stocks would have been 488 million barrels (Total) and 380 million barrels (Other Primary).

Beginning with January 1984, natural gas liquids supply and disposition data were collected on a component basis rather than a product basis. This change affected stocks reported and stock change calculations. Under the new basis, end-of-year 1983 stocks would have been:

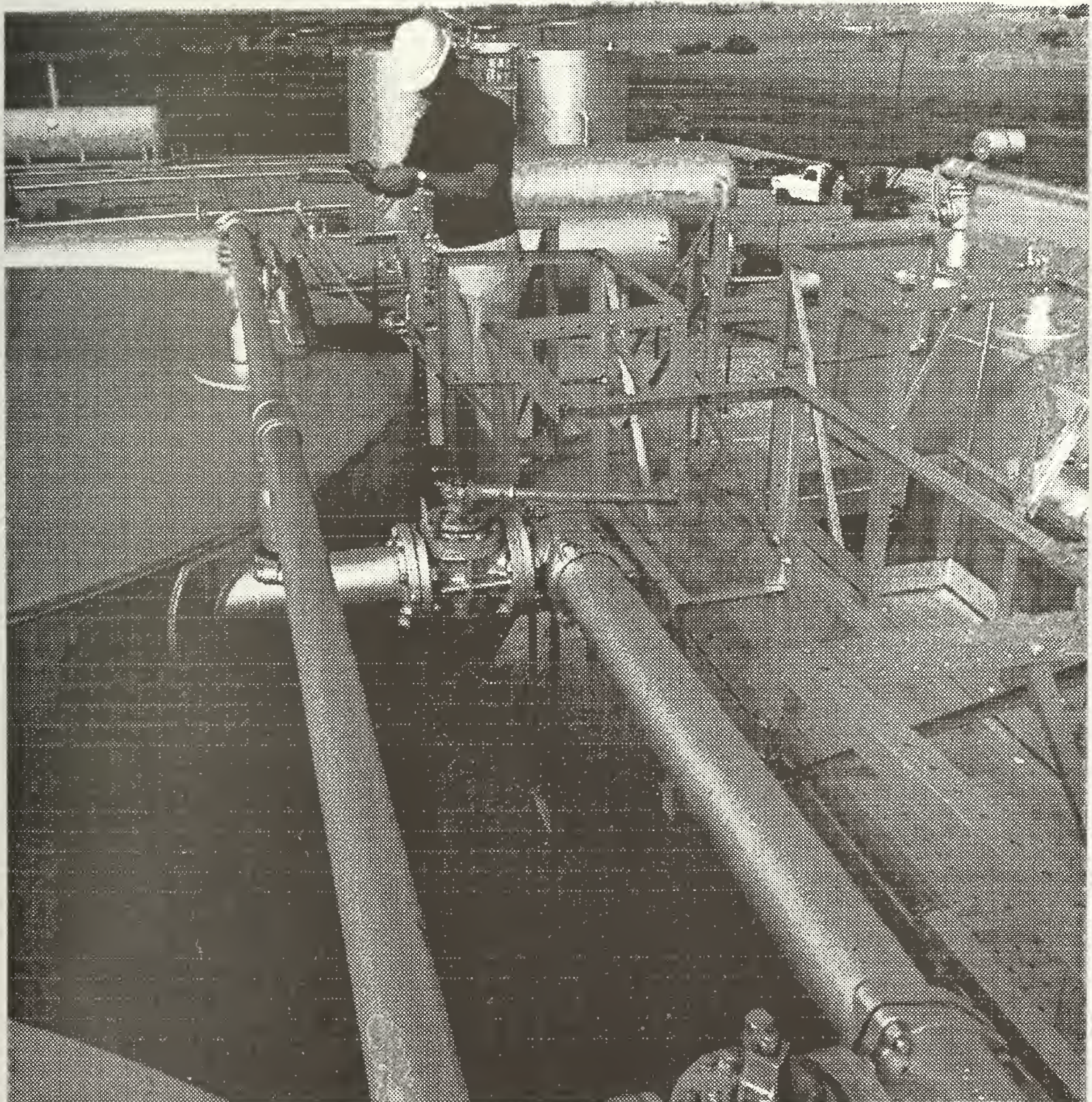
- Propane/Propylene: 1983- 55.
- Liquefied Petroleum Gases: 1983- 108.
- Other Petroleum Products: 1983- 210.

In response to changes in the Clean Air Act Amendments of 1990 requiring that all gasoline sold in carbon monoxide nonattainment areas have an oxygen content of 2.7 percent (by weight) during winter months, the Energy Information Administration (EIA) conducted a frame identifier survey in 1991 of companies that produce, blend, store, or import oxygenates. The purpose of this survey was to (1) identify all U.S. producers, blenders, storers, and importers of oxygenates; and (2) collect supply and blending data for 1990 and end of 1990 inventory data on those oxygenates blended into motor gasoline. A summary of the results from the identification survey were published in the *Weekly Petroleum Status Report* dated February 12, 1992 and in the February 1992 issue of the *Petroleum Supply Monthly*.

In order to continue to provide relevant information about U.S. and regional gasoline supply, the EIA conducted a second frame identifier survey of these companies during 1992. As a result, a number of respondents were added to the monthly surveys effective in January 1993: 19 blenders, 25 stock holders, and 8 importers. This change did not affect stocks reported and therefore did not cause a new basis stock level to be calculated.



## Detailed Statistics



*At some locations, oil skimmers and knockout tanks (in background) are used to remove waste water from the crude oil. The crude oil is then put into storage tanks and gauged.*







Table 1. U.S. Petroleum Balance, 1996

	Commodity	Thousand Barrels	Thousand Barrels per Day
<b>Crude Oil</b>			
	Field Production		
(1)	Alaska .....	509,999	1,393
(2)	Lower 48 States .....	1,856,017	5,071
(3)	<b>Total U.S.</b> .....	<b>2,366,017</b>	<b>6,465</b>
	Net Imports		
(4)	Imports (Gross Excluding Strategic Petroleum Reserve (SPR)) .....	2,747,839	7,508
(5)	SPR Imports .....	0	0
(6)	Exports .....	40,211	110
(7)	<b>Imports (Net Including SPR)</b> .....	<b>2,707,628</b>	<b>7,398</b>
	Other Sources		
(8)	SPR Stock Change (Withdrawal (+), Addition (-)) .....	25,824	71
(9)	Other Stock Change (Withdrawal (+), Addition (-)) .....	19,475	53
(10)	Product Supplied and Losses .....	-2,369	-6
(11)	Unaccounted for <sup>a</sup> .....	78,690	215
(12)	<b>Total Other Sources</b> .....	<b>121,620</b>	<b>332</b>
(13)	<b>Crude Input to Refineries</b> .....	<b>5,195,265</b>	<b>14,195</b>
	(13) = (3) + (7) + (12)		
<b>Natural Gas Liquids (NGL)</b>			
(14)	Field Production <sup>b</sup> .....	699,895	1,912
(15)	Net Imports <sup>c</sup> .....	15,673	43
(16)	Stock Change (Withdrawal (+), Addition (-)) <sup>c</sup> .....	760	2
(17)	<b>Total NGL Supply</b> .....	<b>716,327</b>	<b>1,957</b>
<b>Other Liquids</b>			
	Unfinished Oils and Gasoline Blending Components, Total		
(18)	Stock Change (Withdrawal (+), Addition (-)) .....	7	(s)
(19)	Net Imports .....	206,065	563
(20)	Other Liquids New Supply (Field Production) .....	84,349	230
(21)	Refinery Processing Gain <sup>a</sup> .....	306,443	837
(22)	Crude Oil Product Supplied .....	2,367	6
(23)	<b>Total Other Liquids</b> .....	<b>599,231</b>	<b>1,637</b>
	(23) = (18) through (22)		
(24)	<b>Total Production of Products</b> .....	<b>6,510,823</b>	<b>17,789</b>
	(24) = (13) + (17) + (23)		
<b>Net Imports of Refined Products</b>			
(25)	Imports (Gross) .....	490,799	1,341
(26)	Exports .....	309,933	847
(27)	<b>Imports (Net)</b> .....	<b>180,866</b>	<b>494</b>
(28)	<b>Total New Supply of Products</b> .....	<b>6,691,689</b>	<b>18,283</b>
	(28) = (24) + (27)		
(29)	Refined Products Stock Change (Withdrawal (+), Addition (-)) .....	9,370	26
(30)	<b>Total Petroleum Products Supplied for Domestic Use</b> .....	<b>6,701,059</b>	<b>18,309</b>
	(30) = (28) + (29)		
(31)	Finished Motor Gasoline .....	2,887,953	7,891
(32)	Distillate Fuel Oil .....	1,231,679	3,365
(33)	Residual Fuel Oil .....	310,501	848
(34)	Jet Fuel .....	577,531	1,578
(35)	Liquefied Petroleum Gases .....	736,342	2,012
(36)	Other <sup>d</sup> .....	954,687	2,608
(37)	Crude Oil .....	2,367	6
(38)	<b>Total Products Supplied</b> .....	<b>6,701,059</b>	<b>18,309</b>
	(38) = (31) through (37)		
<b>Ending Stocks, All Oils</b>			
(39)	Crude Oil (Excluding SPR) .....	283,853	--
(40)	Strategic Petroleum Reserve .....	565,816	--
(41)	Finished Motor Gasoline .....	156,990	--
(42)	Distillate Fuel Oil .....	126,729	--
(43)	Residual Fuel Oil .....	45,920	--
(44)	Jet Fuel .....	39,865	--
(45)	Liquefied Petroleum Gases .....	86,213	--
(46)	Other <sup>d</sup> .....	202,030	--
(47)	<b>Total Stocks</b> .....	<b>1,507,416</b>	<b>--</b>
	(47) = (39) through (46)		

<sup>a</sup> Unaccounted for crude oil represents the difference between the supply and disposition of crude oil. Refinery processing gain represents the volumetric amount by which total output is greater than input for a given period of time.

<sup>b</sup> Includes fuel ethanol blended into finished motor gasoline.

<sup>c</sup> Includes products in the pentanes plus category only.

<sup>d</sup> Includes pentanes plus, other liquids, and all finished petroleum products except finished motor gasoline, distillate fuel oil, residual fuel oil, jet fuel, and liquefied petroleum gases.

(s) = Less than 500 barrels per day.

Note: Totals may not equal sum of components due to independent rounding.

Sources: • Energy Information Administration (EIA), Monthly Petroleum Supply Reporting System. • Domestic crude oil production estimates based on historical statistics from State conservation agencies and the Minerals Management Service of the U.S. Department of the Interior. • Export data from the Bureau of the Census and Form EIA-810, "Monthly Refinery Report."

**Table 2. U.S. Supply, Disposition, and Ending Stocks of Crude Oil and Petroleum Products, 1996**  
(Thousand Barrels)

Commodity	Supply				Disposition					Ending Stocks
	Field Production	Refinery Production	Imports	Unaccounted For Crude Oil <sup>a</sup>	Stock Change <sup>b</sup>	Crude Losses	Refinery Inputs	Exports	Products Supplied <sup>c</sup>	
<b>Crude Oil</b> .....	2,366,017	--	2,747,839	78,690	-45,299	2	5,195,265	40,211	2,367	849,669
<b>Natural Gas Liquids and LRGs</b> .....	669,820	242,465	77,286	--	-7,620	--	164,552	19,459	813,180	92,579
Pentanes Plus .....	123,143	--	16,556	--	-760	--	62,738	883	76,838	6,366
Liquefied Petroleum Gases .....	546,677	242,465	60,730	--	-6,860	--	101,814	18,576	736,342	86,213
Ethane/Ethylene .....	229,415	10,554	5,415	--	-4,623	--	0	0	250,007	17,519
Propane/Propylene .....	192,024	190,184	43,736	--	97	--	0	10,220	415,627	43,008
Normal Butane/Butylene .....	55,031	37,669	6,878	--	-2,827	--	52,509	8,355	41,541	17,992
Isobutane/Isobutylene .....	70,207	4,058	4,701	--	493	--	49,305	0	29,168	7,694
<b>Other Liquids</b> .....	84,349	--	213,934	--	-7	--	308,415	7,869	-17,994	139,241
Other Hydrocarbons/Oxygenates .....	101,968	--	18,598	--	1,526	--	114,720	4,320	0	13,132
Unfinished Oils .....	--	--	134,401	--	1,402	--	152,370	0	-19,371	87,860
Motor Gasoline Blend. Comp. ....	-17,619	--	60,935	--	-3,054	--	42,821	3,549	0	37,995
Aviation Gasoline Blend. Comp. ....	--	--	0	--	119	--	-1,496	0	1,377	254
<b>Finished Petroleum Products</b> .....	30,075	5,732,210	430,069	--	-2,510	--	--	291,358	5,903,506	425,927
Finished Motor Gasoline .....	30,075	2,768,619	123,099	--	-4,287	--	--	38,127	2,887,953	156,990
Reformulated .....	--	812,750	63,549	--	1,034	--	--	634	874,631	37,831
Oxygenated .....	124,560	41,576	0	--	-3,547	--	--	163	169,520	1,587
Other .....	-94,485	1,914,293	59,550	--	-1,774	--	--	37,329	1,843,802	117,572
Finished Aviation Gasoline .....	--	7,279	49	--	-72	--	--	0	7,400	2,272
Jet Fuel .....	--	554,497	40,561	--	-146	--	--	17,673	577,531	39,865
Naphtha-Type .....	--	768	610	--	-476	--	--	705	1,149	86
Kerosene-Type .....	--	553,729	39,951	--	330	--	--	16,968	576,382	39,779
Kerosene .....	--	22,758	452	--	-178	--	--	793	22,595	7,021
Distillate Fuel Oil .....	--	1,213,563	84,234	--	-3,485	--	--	69,603	1,231,679	126,729
0.05 percent sulfur and under .....	--	762,633	40,967	--	1,670	--	--	18,587	783,343	68,387
Greater than 0.05 percent sulfur ...	--	450,930	43,267	--	-5,155	--	--	51,016	448,336	58,342
Residual Fuel Oil .....	--	265,544	90,854	--	8,732	--	--	37,165	310,501	45,920
Naphtha For Petro. Feed. Use .....	--	70,060	20,231	--	-1,041	--	--	0	91,332	1,773
Other Oils For Petro. Feed. Use .....	--	73,223	52,030	--	-8	--	--	0	125,261	1,427
Special Naphthas .....	--	18,206	3,457	--	-139	--	--	7,598	14,204	1,890
Lubricants .....	--	63,346	4,185	--	-291	--	--	12,506	55,316	12,674
Waxes .....	--	9,380	468	--	57	--	--	1,002	8,789	914
Petroleum Coke .....	--	242,985	510	--	272	--	--	104,359	138,865	6,680
Asphalt and Road Oil .....	--	167,823	9,833	--	-1,997	--	--	2,448	177,205	20,483
Still Gas .....	--	239,515	0	--	0	--	--	0	239,515	0
Miscellaneous Products .....	--	15,412	106	--	73	--	--	84	15,361	1,289
<b>Total</b> .....	3,150,261	5,974,675	3,469,128	78,690	-55,436	2	5,668,232	358,897	6,701,059	1,507,416

<sup>a</sup> Unaccounted for crude oil represents the difference between the supply and disposition of crude oil.

<sup>b</sup> A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks.

<sup>c</sup> Products supplied is equal to field production, plus refinery production, plus imports, plus unaccounted for crude oil, minus stock change, minus crude losses, minus refinery inputs, minus exports.

LRG = Liquefied Refinery Gas.

Note: Totals may not equal sum of components due to independent rounding.

Sources: • Energy Information Administration (EIA) Forms EIA-810, "Monthly Refinery Report," EIA-811, "Monthly Bulk Terminal Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movement Report," and EIA-819M, "Monthly Oxygenate Telephone Report." • Domestic crude oil production from State conservation agencies and the Minerals Management Service of the U.S. Department of the Interior. • Export data from the Bureau of the Census and Form EIA-810, "Monthly Refinery Report."



**Table 3. U.S. Daily Average Supply and Disposition of Crude Oil and Petroleum Products, 1996**  
(Thousand Barrels per Day)

Commodity	Supply				Disposition				
	Field Production	Refinery Production	Imports	Unaccounted For Crude Oil <sup>a</sup>	Stock Change <sup>b</sup>	Crude Losses	Refinery Inputs	Exports	Products Supplied <sup>c</sup>
<b>Crude Oil</b> .....	6,465	—	7,508	215	-124	(s)	14,195	110	6
<b>Natural Gas Liquids and LRGs</b> .....	1,830	662	211	—	-21	—	450	53	2,222
Pentanes Plus .....	336	—	45	—	-2	—	171	2	210
Liquefied Petroleum Gases .....	1,494	662	166	—	-19	—	278	51	2,012
Ethane/Ethylene .....	627	29	15	—	-13	—	0	0	683
Propane/Propylene .....	525	520	119	—	(s)	—	0	28	1,136
Normal Butane/Butylene .....	150	103	19	—	-8	—	143	23	113
Isobutane/Isobutylene .....	192	11	13	—	1	—	135	0	80
<b>Other Liquids</b> .....	230	—	585	—	(s)	—	843	22	-49
Other Hydrocarbons/Oxygenates .....	279	—	51	—	4	—	313	12	0
Unfinished Oils .....	—	—	367	—	4	—	416	0	-53
Motor Gasoline Blend. Comp. ....	-48	—	166	—	-8	—	117	10	0
Aviation Gasoline Blend. Comp. ....	—	—	0	—	(s)	—	-4	0	4
<b>Finished Petroleum Products</b> .....	82	15,662	1,175	—	-7	—	—	796	16,130
Finished Motor Gasoline .....	82	7,565	336	—	-12	—	—	104	7,891
Reformulated .....	—	2,221	174	—	3	—	—	2	2,390
Oxygenated .....	340	114	0	—	-10	—	—	(s)	463
Other .....	-258	5,230	163	—	-5	—	—	102	5,038
Finished Aviation Gasoline .....	—	20	(s)	—	(s)	—	—	0	20
Jet Fuel .....	—	1,515	111	—	(s)	—	—	48	1,578
Naphtha-Type .....	—	2	2	—	-1	—	—	2	3
Kerosene-Type .....	—	1,513	109	—	1	—	—	46	1,575
Kerosene .....	—	62	1	—	(s)	—	—	2	62
Distillate Fuel Oil .....	—	3,316	230	—	-10	—	—	190	3,365
0.05 percent sulfur and under .....	—	2,084	112	—	5	—	—	51	2,140
Greater than 0.05 percent sulfur ...	—	1,232	118	—	-14	—	—	139	1,225
Residual Fuel Oil .....	—	726	248	—	24	—	—	102	848
Naphtha For Petro. Feed. Use .....	—	191	55	—	-3	—	—	0	250
Other Oils For Petro. Feed. Use .....	—	200	142	—	(s)	—	—	0	342
Special Naphthas .....	—	50	9	—	(s)	—	—	21	39
Lubricants .....	—	173	11	—	-1	—	—	34	151
Waxes .....	—	26	1	—	(s)	—	—	3	24
Petroleum Coke .....	—	664	1	—	1	—	—	285	379
Asphalt and Road Oil .....	—	459	27	—	-5	—	—	7	484
Still Gas .....	—	654	0	—	0	—	—	0	654
Miscellaneous Products .....	—	42	(s)	—	(s)	—	—	(s)	42
<b>Total</b> .....	8,607	16,324	9,478	215	-151	(s)	15,487	981	18,309

<sup>a</sup> Unaccounted for crude oil represents the difference between the supply and disposition of crude oil.

<sup>b</sup> A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks.

<sup>c</sup> Products supplied is equal to field production, plus refinery production, plus imports, plus unaccounted for crude oil, minus stock change, minus crude losses, minus refinery inputs, minus exports.

(s) = Less than 500 barrels per day.

LRG = Liquefied Refinery Gas.

Note: Totals may not equal sum of components due to independent rounding.

Sources: • Energy Information Administration (EIA) Forms EIA-810, "Monthly Refinery Report," EIA-811, "Monthly Bulk Terminal Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movement Report," and EIA-819M, "Monthly Oxygenate Telephone Report". • Domestic crude oil production from State conservation agencies and the Minerals Management Service of the U.S. Department of the Interior. • Export data from the Bureau of the Census and Form EIA-810, "Monthly Refinery Report."



**Table 4. PAD District I—Supply, Disposition, and Ending Stocks of Crude Oil and Petroleum Products, 1996**  
(Thousand Barrels)

Commodity	Supply					Disposition					Ending Stocks
	Field Production	Refinery Production	Imports by PAD District of Entry <sup>a</sup>	Unaccounted For Crude Oil <sup>b</sup>	Net Receipts	Stock Change <sup>c</sup>	Crude Losses	Refinery Inputs	Exports	Products Supplied <sup>d</sup>	
Crude Oil .....	9,984	--	465,120	20,969	-7,070	2,003	0	487,000	(s)	0	13,537
Natural Gas Liquids and LRGs .....	7,678	15,761	11,052	--	43,737	732	--	1,922	992	74,582	6,039
Pentanes Plus .....	885	--	143	--	0	-126	--	255	43	856	30
Liquefied Petroleum Gases .....	6,793	15,761	10,909	--	43,737	858	--	1,667	949	73,726	6,009
Ethane/Ethylene .....	2,815	0	0	--	0	-11	--	0	0	2,826	1
Propane/Propylene .....	2,610	15,728	10,529	--	43,631	1,480	--	0	452	70,566	4,878
Normal Butane/Butylene .....	1,042	-170	329	--	106	-574	--	773	497	611	947
Isobutane/Isobutylene .....	326	203	51	--	0	-37	--	894	0	-277	183
Other Liquids .....	7,489	--	83,893	--	6,232	1,527	--	110,409	379	-14,701	18,304
Other Hydrocarbons/Oxygenates ..	18,678	--	3,766	--	0	212	--	22,217	15	0	1,876
Unfinished Oils .....	--	--	21,976	--	126	490	--	37,679	0	-16,067	9,765
Motor Gasoline Blend. Comp. ....	-11,189	--	58,151	--	6,106	712	--	51,992	364	0	6,470
Aviation Gasoline Blend. Comp. ...	--	--	0	--	0	113	--	-1,479	0	1,366	193
Finished Petroleum Products .....	11,812	606,441	331,565	--	1,011,635	-3,721	--	--	13,099	1,952,075	135,983
Finished Motor Gasoline .....	11,812	308,717	116,685	--	576,549	-4,046	--	--	617	1,017,192	45,015
Reformulated .....	--	203,195	60,924	--	131,978	-3,130	--	--	(s)	399,227	17,253
Oxygenated .....	6,228	0	0	--	1,958	-535	--	--	5	8,716	358
Other .....	5,584	105,522	55,761	--	442,613	-381	--	--	611	609,250	27,404
Finished Aviation Gasoline .....	--	85	9	--	745	-15	--	--	0	854	817
Jet Fuel .....	--	26,291	36,592	--	154,534	-521	--	--	751	217,187	9,678
Naphtha-Type .....	--	0	55	--	0	0	--	--	1	54	0
Kerosene-Type .....	--	26,291	36,537	--	154,534	-521	--	--	750	217,133	9,678
Kerosene .....	--	2,917	431	--	2,598	422	--	--	202	5,322	4,472
Distillate Fuel Oil .....	--	140,425	77,259	--	247,354	-4,581	--	--	3,390	466,229	47,390
0.05 percent sulfur and under ...	--	47,671	37,163	--	138,912	1,457	--	--	1,381	220,908	19,079
Greater than 0.05 percent sulfur	--	92,754	40,096	--	108,442	-6,038	--	--	2,008	245,322	28,311
Residual Fuel Oil .....	--	47,143	82,043	--	16,136	7,115	--	--	1,906	136,301	21,780
Petrochemical Feedstocks <sup>e</sup> .....	--	3,362	3,427	--	38	48	--	--	0	6,779	381
Special Naphthas .....	--	877	1,932	--	974	-36	--	--	241	3,578	118
Lubricants .....	--	7,374	3,821	--	8,932	-403	--	--	1,766	18,764	2,419
Waxes .....	--	1,861	260	--	0	26	--	--	201	1,894	212
Petroleum Coke .....	--	17,353	129	--	0	-72	--	--	3,365	14,189	473
Asphalt and Road Oil .....	--	28,903	8,954	--	3,721	-1,644	--	--	606	42,616	3,124
Still Gas .....	--	20,426	0	--	0	0	--	--	0	20,426	0
Miscellaneous Products .....	--	707	23	--	54	-14	--	--	54	744	104
<b>Total .....</b>	<b>36,963</b>	<b>622,202</b>	<b>891,630</b>	<b>20,969</b>	<b>1,054,534</b>	<b>541</b>	<b>0</b>	<b>599,331</b>	<b>14,470</b>	<b>2,011,956</b>	<b>173,863</b>

<sup>a</sup> Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.

<sup>b</sup> Unaccounted for crude oil represents the difference between the supply and disposition of crude oil.

<sup>c</sup> A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks.

<sup>d</sup> Products supplied is equal to field production, plus refinery production, plus imports, plus unaccounted for crude oil, plus net receipts, minus stock change, minus crude losses, minus refinery inputs, minus exports.

<sup>e</sup> Includes naphtha less than 401° F endpoint and other oils equal to or greater than 401° F endpoint.

(s) = Less than 500 barrels.

LRG = Liquefied Refinery Gas.

Note: Totals may not equal sum of components due to independent rounding.

Sources: • Energy Information Administration (EIA) Forms EIA-810, "Monthly Refinery Report," EIA-811, "Monthly Bulk Terminal Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movement Report," and EIA-819M, "Monthly Oxygenate Telephone Report". • Domestic crude oil production from State conservation agencies and the Minerals Management Service of the U.S. Department of the Interior. • Export data from the Bureau of the Census and Form EIA-810, "Monthly Refinery Report."

**Table 5. PAD District I—Daily Average Supply and Disposition of Crude Oil and Petroleum Products, 1996**  
(Thousand Barrels per Day)

Commodity	Supply					Disposition				
	Field Production	Refinery Production	Imports by PAD District of Entry <sup>a</sup>	Unaccounted For Crude Oil <sup>b</sup>	Net Receipts	Stock Change <sup>c</sup>	Crude Losses	Refinery Inputs	Exports	Products Supplied <sup>d</sup>
Crude Oil .....	27	--	1,271	57	-19	5	0	1,331	(s)	0
Natural Gas Liquids and LRGs .....	21	43	30	--	120	2	--	5	3	204
Pentanes Plus .....	2	--	(s)	--	0	(s)	--	1	(s)	2
Liquefied Petroleum Gases .....	19	43	30	--	120	2	--	5	3	201
Ethane/Ethylene .....	8	0	0	--	0	(s)	--	0	0	8
Propane/Propylene .....	7	43	29	--	119	4	--	0	1	193
Normal Butane/Butylene .....	3	(s)	1	--	(s)	-2	--	2	1	2
Isobutane/Isobutylene .....	1	1	(s)	--	0	(s)	--	2	0	-1
Other Liquids .....	20	--	229	--	17	4	--	302	1	-40
Other Hydrocarbons/Oxygenates ....	51	--	10	--	0	1	--	61	(s)	0
Unfinished Oils .....	--	--	60	--	(s)	1	--	103	0	-44
Motor Gasoline Blend. Comp. ....	-31	--	159	--	17	2	--	142	1	0
Aviation Gasoline Blend. Comp. ....	--	--	0	--	0	(s)	--	-4	0	4
Finished Petroleum Products .....	32	1,657	906	--	2,764	-10	--	--	36	5,334
Finished Motor Gasoline .....	32	843	319	--	1,575	-11	--	--	2	2,779
Reformulated .....	--	555	166	--	361	-9	--	--	(s)	1,091
Oxygenated .....	17	0	0	--	5	-1	--	--	(s)	24
Other .....	15	288	152	--	1,209	-1	--	--	2	1,665
Finished Aviation Gasoline .....	--	(s)	(s)	--	2	(s)	--	--	0	2
Jet Fuel .....	--	72	100	--	422	-1	--	--	2	593
Naphtha-Type .....	--	0	(s)	--	0	0	--	--	(s)	(s)
Kerosene-Type .....	--	72	100	--	422	-1	--	--	2	593
Kerosene .....	--	8	1	--	7	1	--	--	1	15
Distillate Fuel Oil .....	--	384	211	--	676	-13	--	--	9	1,274
0.05 percent sulfur and under .....	--	130	102	--	380	4	--	--	4	604
Greater than 0.05 percent sulfur ...	--	253	110	--	296	-16	--	--	5	670
Residual Fuel Oil .....	--	129	224	--	44	19	--	--	5	372
Petrochemical Feedstocks <sup>e</sup> .....	--	9	9	--	(s)	(s)	--	--	0	19
Special Naphthas .....	--	2	5	--	3	(s)	--	--	1	10
Lubricants .....	--	20	10	--	24	-1	--	--	5	51
Waxes .....	--	5	1	--	0	(s)	--	--	1	5
Petroleum Coke .....	--	47	(s)	--	0	(s)	--	--	9	39
Asphalt and Road Oil .....	--	79	24	--	10	-4	--	--	2	116
Still Gas .....	--	56	0	--	0	0	--	--	0	56
Miscellaneous Products .....	--	2	(s)	--	(s)	(s)	--	--	(s)	2
<b>Total .....</b>	<b>101</b>	<b>1,700</b>	<b>2,436</b>	<b>57</b>	<b>2,881</b>	<b>1</b>	<b>0</b>	<b>1,638</b>	<b>40</b>	<b>5,497</b>

<sup>a</sup> Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.

<sup>b</sup> Unaccounted for crude oil represents the difference between the supply and disposition of crude oil.

<sup>c</sup> A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks.

<sup>d</sup> Products supplied is equal to field production, plus refinery production, plus imports, plus unaccounted for crude oil, plus net receipts, minus stock change, minus crude losses, minus refinery inputs, minus exports.

<sup>e</sup> Includes naphtha less than 401° F endpoint and other oils equal to or greater than 401° F endpoint.

(s) = Less than 500 barrels per day.

LRG = Liquefied Refinery Gas.

Note: Totals may not equal sum of components due to independent rounding.

Sources: • Energy Information Administration (EIA) Forms EIA-810, "Monthly Refinery Report," EIA-811, "Monthly Bulk Terminal Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movement Report," and EIA-819M, "Monthly Oxygenate Telephone Report". • Domestic crude oil production from State conservation agencies and the Minerals Management Service of the U.S. Department of the Interior. • Export data from the Bureau of the Census and Form EIA-810, "Monthly Refinery Report."



**Table 6. PAD District II—Supply, Disposition, and Ending Stocks of Crude Oil and Petroleum Products, 1996**  
(Thousand Barrels)

Commodity	Supply					Disposition					Ending Stocks
	Field Production	Refinery Production	Imports by PAD District of Entry <sup>a</sup>	Unaccounted For Crude Oil <sup>b</sup>	Net Receipts	Stock Change <sup>c</sup>	Crude Losses	Refinery Inputs	Exports	Products Supplied <sup>d</sup>	
Crude Oil .....	205,620	--	280,681	16,047	694,139	-405	0	1,191,005	5,887	0	63,415
Natural Gas Liquids and LRGs .....	112,759	46,109	23,399	--	4,908	-2,701	--	34,627	3,545	151,704	26,412
Pentanes Plus .....	16,042	--	176	--	6,597	308	--	10,725	838	10,944	1,924
Liquefied Petroleum Gases .....	96,717	46,109	23,223	--	-1,689	-3,009	--	23,902	2,707	140,760	24,488
Ethane/Ethylene .....	35,055	0	131	--	-21,372	1,384	--	0	0	12,430	3,469
Propane/Propylene .....	40,735	41,397	20,267	--	16,695	-3,875	--	0	714	122,255	13,433
Normal Butane/Butylene .....	12,450	3,930	1,643	--	-972	-354	--	11,238	1,993	4,174	5,581
Isobutane/Isobutylene .....	8,477	782	1,182	--	3,960	-164	--	12,664	0	1,901	2,005
Other Liquids .....	-4,828	--	456	--	20,773	-1,760	--	27,941	51	-9,831	22,245
Other Hydrocarbons/Oxygenates .....	11,899	--	38	--	0	18	--	11,896	23	0	1,659
Unfinished Oils .....	--	--	230	--	857	-83	--	11,010	0	-9,840	11,834
Motor Gasoline Blend. Comp. ....	-16,727	--	188	--	19,916	-1,701	--	5,050	28	0	8,724
Aviation Gasoline Blend. Comp. ....	--	--	0	--	0	6	--	-15	0	9	28
Finished Petroleum Products .....	26,194	1,268,353	4,973	--	295,799	-1,250	--	--	6,223	1,590,346	98,449
Finished Motor Gasoline .....	26,194	662,594	1,153	--	181,913	75	--	--	198	871,581	41,059
Reformulated .....	--	86,955	0	--	135	-289	--	--	0	87,379	1,100
Oxygenated .....	94,666	24,706	0	--	-2,106	331	--	--	15	116,920	944
Other .....	-68,472	550,933	1,153	--	183,884	33	--	--	183	667,283	39,015
Finished Aviation Gasoline .....	--	1,400	29	--	902	-48	--	--	0	2,379	426
Jet Fuel .....	--	77,073	0	--	39,548	1,136	--	--	118	115,367	8,659
Naphtha-Type .....	--	13	0	--	0	-141	--	--	1	153	37
Kerosene-Type .....	--	77,060	0	--	39,548	1,277	--	--	117	115,214	8,622
Kerosene .....	--	8,153	0	--	390	-463	--	--	7	8,999	1,408
Distillate Fuel Oil .....	--	301,971	2,180	--	69,359	635	--	--	277	372,598	32,094
0.05 percent sulfur and under .....	--	208,833	1,584	--	60,547	928	--	--	5	270,031	22,399
Greater than 0.05 percent sulfur ...	--	93,138	596	--	8,812	-293	--	--	272	102,567	9,695
Residual Fuel Oil .....	--	21,588	109	--	-2,882	-217	--	--	728	18,304	1,891
Petrochemical Feedstocks <sup>e</sup> .....	--	14,071	399	--	350	-700	--	--	0	15,520	213
Special Naphthas .....	--	4,698	212	--	1,004	51	--	--	93	5,770	228
Lubricants .....	--	8,377	263	--	2,392	-166	--	--	668	10,531	1,615
Waxes .....	--	1,116	172	--	0	60	--	--	214	1,014	165
Petroleum Coke .....	--	49,993	0	--	0	329	--	--	2,518	47,146	1,523
Asphalt and Road Oil .....	--	66,128	416	--	2,823	-2,001	--	--	1,401	69,967	8,921
Still Gas .....	--	47,638	0	--	0	0	--	--	0	47,638	0
Miscellaneous Products .....	--	3,553	40	--	0	59	--	--	1	3,533	247
<b>Total .....</b>	<b>339,745</b>	<b>1,314,462</b>	<b>309,509</b>	<b>16,047</b>	<b>1,015,619</b>	<b>-6,116</b>	<b>0</b>	<b>1,253,573</b>	<b>15,705</b>	<b>1,732,219</b>	<b>210,521</b>

<sup>a</sup> Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.

<sup>b</sup> Unaccounted for crude oil represents the difference between the supply and disposition of crude oil.

<sup>c</sup> A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks.

<sup>d</sup> Products supplied is equal to field production, plus refinery production, plus imports, plus unaccounted for crude oil, plus net receipts, minus stock change, minus crude losses, minus refinery inputs, minus exports.

<sup>e</sup> Includes naphtha less than 401° F endpoint and other oils equal to or greater than 401° F endpoint.

(s) = Less than 500 barrels.

LRG = Liquefied Refinery Gas.

Note: Totals may not equal sum of components due to independent rounding.

Sources: • Energy Information Administration (EIA) Forms EIA-810, "Monthly Refinery Report," EIA-811, "Monthly Bulk Terminal Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movement Report," and EIA-819M, "Monthly Oxygenate Telephone Report". • Domestic crude oil production from State conservation agencies and the Minerals Management Service of the U.S. Department of the Interior. • Export data from the Bureau of the Census and Form EIA-810, "Monthly Refinery Report."

**Table 7. PAD District II—Daily Average Supply and Disposition of Crude Oil and Petroleum Products, 1996**  
(Thousand Barrels per Day)

Commodity	Supply					Disposition				
	Field Production	Refinery Production	Imports by PAD District of Entry <sup>a</sup>	Unaccounted For Crude Oil <sup>b</sup>	Net Receipts	Stock Change <sup>c</sup>	Crude Losses	Refinery Inputs	Exports	Products Supplied <sup>d</sup>
Crude Oil .....	562	--	767	44	1,897	-1	0	3,254	16	0
Natural Gas Liquids and LRGs .....	308	126	64	--	13	-7	--	95	10	414
Pentanes Plus .....	44	--	(s)	--	18	1	--	29	2	30
Liquefied Petroleum Gases .....	264	126	63	--	-5	-8	--	65	7	385
Ethane/Ethylene .....	96	0	(s)	--	-58	4	--	0	0	34
Propane/Propylene .....	111	113	55	--	46	-11	--	0	2	334
Normal Butane/Butylene .....	34	11	4	--	-3	-1	--	31	5	11
Isobutane/Isobutylene .....	23	2	3	--	11	(s)	--	35	0	5
Other Liquids .....	-13	--	1	--	57	-5	--	76	(s)	-27
Other Hydrocarbons/Oxygenates ....	33	--	(s)	--	0	(s)	--	33	(s)	0
Unfinished Oils .....	--	--	1	--	2	(s)	--	30	0	-27
Motor Gasoline Blend. Comp. ....	-46	--	1	--	54	-5	--	14	(s)	0
Aviation Gasoline Blend. Comp. ....	--	--	0	--	0	(s)	--	(s)	0	(s)
Finished Petroleum Products .....	72	3,465	14	--	808	-3	--	--	17	4,345
Finished Motor Gasoline .....	72	1,810	3	--	497	(s)	--	--	1	2,381
Reformulated .....	--	238	0	--	(s)	-1	--	--	0	239
Oxygenated .....	259	68	0	--	-6	1	--	--	(s)	319
Other .....	-187	1,505	3	--	502	(s)	--	--	(s)	1,823
Finished Aviation Gasoline .....	--	4	(s)	--	2	(s)	--	--	0	7
Jet Fuel .....	--	211	0	--	108	3	--	--	(s)	315
Naphtha-Type .....	--	(s)	0	--	0	(s)	--	--	(s)	(s)
Kerosene-Type .....	--	211	0	--	108	3	--	--	(s)	315
Kerosene .....	--	22	0	--	1	-1	--	--	(s)	25
Distillate Fuel Oil .....	--	825	6	--	190	2	--	--	1	1,018
0.05 percent sulfur and under .....	--	571	4	--	165	3	--	--	(s)	738
Greater than 0.05 percent sulfur ...	--	254	2	--	24	-1	--	--	1	280
Residual Fuel Oil .....	--	59	(s)	--	-8	-1	--	--	2	50
Petrochemical Feedstocks <sup>e</sup> .....	--	38	1	--	1	-2	--	--	0	42
Special Naphthas .....	--	13	1	--	3	(s)	--	--	(s)	16
Lubricants .....	--	23	1	--	7	(s)	--	--	2	29
Waxes .....	--	3	(s)	--	0	(s)	--	--	1	3
Petroleum Coke .....	--	137	0	--	0	1	--	--	7	129
Asphalt and Road Oil .....	--	181	1	--	8	-5	--	--	4	191
Still Gas .....	--	130	0	--	0	0	--	--	0	130
Miscellaneous Products .....	--	10	(s)	--	0	(s)	--	--	(s)	10
Total .....	928	3,591	846	44	2,775	-17	0	3,425	43	4,733

<sup>a</sup> Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.

<sup>b</sup> Unaccounted for crude oil represents the difference between the supply and disposition of crude oil.

<sup>c</sup> A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks.

<sup>d</sup> Products supplied is equal to field production, plus refinery production, plus imports, plus unaccounted for crude oil, plus net receipts, minus stock change, minus crude losses, minus refinery inputs, minus exports.

<sup>e</sup> Includes naphtha less than 401° F endpoint and other oils equal to or greater than 401° F endpoint.

(s) = Less than 500 barrels per day.

LRG = Liquefied Refinery Gas.

Note: Totals may not equal sum of components due to independent rounding.

Sources: • Energy Information Administration (EIA) Forms EIA-810, "Monthly Refinery Report," EIA-811, "Monthly Bulk Terminal Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movement Report," and EIA-819M, "Monthly Oxygenate Telephone Report". • Domestic crude oil production from State conservation agencies and the Minerals Management Service of the U.S. Department of the Interior. • Export data from the Bureau of the Census and Form EIA-810, "Monthly Refinery Report."



**Table 8. PAD District III—Supply, Disposition, and Ending Stocks of Crude Oil and Petroleum Products, 1996**  
(Thousand Barrels)

Commodity	Supply					Disposition					Ending Stocks
	Field Production	Refinery Production	Imports by PAD District of Entry <sup>a</sup>	Unaccounted For Crude Oil <sup>b</sup>	Net Receipts	Stock Change <sup>c</sup>	Crude Losses	Refinery Inputs	Exports	Products Supplied <sup>d</sup>	
Crude Oil .....	1,158,804	--	1,820,016	26,205	-605,551	-31,399	0	2,430,873	0	0	699,843
Natural Gas Liquids and LRGs .....	448,781	150,816	38,088	--	-1,969	-5,436	--	84,378	7,383	549,391	54,962
Pentanes Plus .....	73,258	--	15,412	--	-1,710	-952	--	31,673	1	56,238	4,202
Liquefied Petroleum Gases .....	375,523	150,816	22,676	--	-259	-4,484	--	52,705	7,382	493,153	50,760
Ethane/Ethylene .....	171,378	10,554	5,284	--	43,790	-5,999	--	0	0	237,005	13,829
Propane/Propylene .....	126,799	113,510	11,075	--	-49,304	2,633	--	0	6,208	193,239	22,822
Normal Butane/Butylene .....	25,288	23,797	3,629	--	5,915	-1,921	--	24,597	1,174	34,779	9,123
Isobutane/Isobutylene .....	52,058	2,955	2,688	--	-660	803	--	28,108	0	28,130	4,986
Other Liquids .....	52,897	--	104,677	--	-26,209	189	--	128,669	6,985	-4,478	60,126
Other Hydrocarbons/Oxygenates ....	39,691	--	850	--	0	915	--	35,357	4,269	0	5,119
Unfinished Oils .....	--	--	103,747	--	-113	881	--	107,233	0	-4,480	41,478
Motor Gasoline Blend. Comp. ....	13,205	--	80	--	-26,096	-1,603	--	-13,923	2,715	0	13,507
Aviation Gasoline Blend. Comp. ....	--	--	0	--	0	-4	--	2	0	2	22
Finished Petroleum Products .....	-12,209	2,652,024	80,661	--	-1,362,888	1,265	--	--	174,414	1,181,910	125,260
Finished Motor Gasoline .....	-12,209	1,234,953	1,991	--	-790,190	-2,512	--	--	33,389	403,668	44,558
Reformulated .....	--	222,369	904	--	-134,270	-1,203	--	--	547	89,659	8,650
Oxygenated .....	9,965	900	0	--	0	-96	--	--	64	10,897	1
Other .....	-22,174	1,011,684	1,087	--	-655,920	-1,213	--	--	32,778	303,113	35,907
Finished Aviation Gasoline .....	--	3,984	0	--	-1,796	-36	--	--	0	2,224	434
Jet Fuel .....	--	278,292	1,162	--	-210,226	-762	--	--	9,739	60,251	12,993
Naphtha-Type .....	--	7	0	--	0	-27	--	--	243	-209	0
Kerosene-Type .....	--	278,285	1,162	--	-210,226	-735	--	--	9,497	60,459	12,993
Kerosene .....	--	9,150	0	--	-2,752	-202	--	--	339	6,261	911
Distillate Fuel Oil .....	--	559,843	41	--	-324,642	1,553	--	--	37,246	196,443	31,501
0.05 percent sulfur and under .....	--	346,186	0	--	-205,179	-237	--	--	12,565	128,679	15,502
Greater than 0.05 percent sulfur ...	--	213,657	41	--	-119,463	1,790	--	--	24,681	67,764	15,999
Residual Fuel Oil .....	--	111,841	7,316	--	-13,254	1,757	--	--	22,126	82,020	15,493
Petrochemical Feedstocks <sup>e</sup> .....	--	121,292	68,247	--	-388	-489	--	--	0	189,640	2,321
Special Naphthas .....	--	11,925	1,271	--	-1,978	-149	--	--	781	10,586	1,498
Lubricants .....	--	38,805	101	--	-11,064	380	--	--	8,716	18,746	7,073
Waxes .....	--	4,501	15	--	0	-99	--	--	391	4,224	388
Petroleum Coke .....	--	115,396	143	--	0	979	--	--	61,422	53,138	3,140
Asphalt and Road Oil .....	--	42,118	345	--	-6,544	767	--	--	260	34,893	4,213
Still Gas .....	--	111,123	0	--	0	0	--	--	0	111,123	0
Miscellaneous Products .....	--	8,801	29	--	-54	78	--	--	3	8,695	737
<b>Total .....</b>	<b>1,648,273</b>	<b>2,802,840</b>	<b>2,043,442</b>	<b>26,205</b>	<b>-1,996,617</b>	<b>-35,381</b>	<b>0</b>	<b>2,643,920</b>	<b>188,781</b>	<b>1,726,823</b>	<b>940,191</b>

<sup>a</sup> Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.

<sup>b</sup> Unaccounted for crude oil represents the difference between the supply and disposition of crude oil.

<sup>c</sup> A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks.

<sup>d</sup> Products supplied is equal to field production, plus refinery production, plus imports, plus unaccounted for crude oil, plus net receipts, minus stock change, minus crude losses, minus refinery inputs, minus exports.

<sup>e</sup> Includes naphtha less than 401° F endpoint and other oils equal to or greater than 401° F endpoint.

(s) = Less than 500 barrels.

LRG = Liquefied Refinery Gas.

Note: Totals may not equal sum of components due to independent rounding.

Sources: • Energy Information Administration (EIA) Forms EIA-810, "Monthly Refinery Report," EIA-811, "Monthly Bulk Terminal Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movement Report," and EIA-819M, "Monthly Oxygenate Telephone Report". • Domestic crude oil production from State conservation agencies and the Minerals Management Service of the U.S. Department of the Interior. • Export data from the Bureau of the Census and Form EIA-810, "Monthly Refinery Report."

**Table 9. PAD District III—Daily Average Supply and Disposition of Crude Oil and Petroleum Products, 1996**  
(Thousand Barrels per Day)

Commodity	Supply					Disposition				
	Field Production	Refinery Production	Imports by PAD District of Entry <sup>a</sup>	Unaccounted For Crude Oil <sup>b</sup>	Net Receipts	Stock Change <sup>c</sup>	Crude Losses	Refinery Inputs	Exports	Products Supplied <sup>d</sup>
Crude Oil .....	3,166	--	4,973	72	-1,655	-86	0	6,642	0	0
Natural Gas Liquids and LRGs .....	1,226	412	104	--	-5	-15	--	231	20	1,501
Pentanes Plus .....	200	--	42	--	-5	-3	--	87	(s)	154
Liquefied Petroleum Gases .....	1,026	412	62	--	-1	-12	--	144	20	1,347
Ethane/Ethylene .....	468	29	14	--	120	-16	--	0	0	648
Propane/Propylene .....	346	310	30	--	-135	7	--	0	17	528
Normal Butane/Butylene .....	69	65	10	--	16	-5	--	67	3	95
Isobutane/Isobutylene .....	142	8	7	--	-2	2	--	77	0	77
Other Liquids .....	145	--	286	--	-72	1	--	352	19	-12
Other Hydrocarbons/Oxygenates ....	108	--	2	--	0	3	--	97	12	0
Unfinished Oils .....	--	--	283	--	(s)	2	--	293	0	-12
Motor Gasoline Blend. Comp. ....	36	--	(s)	--	-71	-4	--	-38	7	0
Aviation Gasoline Blend. Comp. ....	--	--	0	--	0	(s)	--	(s)	0	(s)
Finished Petroleum Products .....	-33	7,246	220	--	-3,724	3	--	--	477	3,229
Finished Motor Gasoline .....	-33	3,374	5	--	-2,159	-7	--	--	91	1,103
Reformulated .....	--	608	2	--	-367	-3	--	--	1	245
Oxygenated .....	27	2	0	--	0	(s)	--	--	(s)	30
Other .....	-61	2,764	3	--	-1,792	-3	--	--	90	828
Finished Aviation Gasoline .....	--	11	0	--	-5	(s)	--	--	0	6
Jet Fuel .....	--	760	3	--	-574	-2	--	--	27	165
Naphtha-Type .....	--	(s)	0	--	0	(s)	--	--	1	-1
Kerosene-Type .....	--	760	3	--	-574	-2	--	--	26	165
Kerosene .....	--	25	0	--	-8	-1	--	--	1	17
Distillate Fuel Oil .....	--	1,530	(s)	--	-887	4	--	--	102	537
0.05 percent sulfur and under .....	--	946	0	--	-561	-1	--	--	34	352
Greater than 0.05 percent sulfur ..	--	584	(s)	--	-326	5	--	--	67	185
Residual Fuel Oil .....	--	306	20	--	-36	5	--	--	60	224
Petrochemical Feedstocks <sup>e</sup> .....	--	331	186	--	-1	-1	--	--	0	518
Special Naphthas .....	--	33	3	--	-5	(s)	--	--	2	29
Lubricants .....	--	106	(s)	--	-30	1	--	--	24	51
Waxes .....	--	12	(s)	--	0	(s)	--	--	1	12
Petroleum Coke .....	--	315	(s)	--	0	3	--	--	168	145
Asphalt and Road Oil .....	--	115	1	--	-18	2	--	--	1	95
Still Gas .....	--	304	0	--	0	0	--	--	0	304
Miscellaneous Products .....	--	24	(s)	--	(s)	(s)	--	--	(s)	24
Total .....	4,503	7,658	5,583	72	-5,455	-97	0	7,224	516	4,718

<sup>a</sup> Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.

<sup>b</sup> Unaccounted for crude oil represents the difference between the supply and disposition of crude oil.

<sup>c</sup> A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks.

<sup>d</sup> Products supplied is equal to field production, plus refinery production, plus imports, plus unaccounted for crude oil, plus net receipts, minus stock change, minus crude losses, minus refinery inputs, minus exports.

<sup>e</sup> Includes naphtha less than 401° F endpoint and other oils equal to or greater than 401° F endpoint.

(s) = Less than 500 barrels per day.

LRG = Liquefied Refinery Gas.

Note: Totals may not equal sum of components due to independent rounding.

Sources: • Energy Information Administration (EIA) Forms EIA-810, "Monthly Refinery Report," EIA-811, "Monthly Bulk Terminal Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movement Report," and EIA-819M, "Monthly Oxygenate Telephone Report". • Domestic crude oil production from State conservation agencies and the Minerals Management Service of the U.S. Department of the Interior. • Export data from the Bureau of the Census and Form EIA-810, "Monthly Refinery Report."



**Table 10. PAD District IV—Supply, Disposition, and Ending Stocks of Crude Oil and Petroleum Products, 1996**  
(Thousand Barrels)

Commodity	Supply					Disposition					Ending Stocks
	Field Production	Refinery Production	Imports by PAD District of Entry <sup>a</sup>	Unaccounted For Crude Oil <sup>b</sup>	Net Receipts	Stock Change <sup>c</sup>	Crude Losses	Refinery Inputs	Exports	Products Supplied <sup>d</sup>	
Crude Oil .....	133,638	--	45,571	7,480	-16,552	-1,567	0	171,704	(s)	0	11,016
Natural Gas Liquids and LRGs .....	57,913	2,145	4,222	--	-46,676	-167	--	5,374	3	12,394	1,213
Pentanes Plus .....	9,622	--	825	--	-4,887	-8	--	1,456	0	4,112	170
Liquefied Petroleum Gases .....	48,291	2,145	3,397	--	-41,789	-159	--	3,918	3	8,282	1,043
Ethane/Ethylene .....	20,155	0	0	--	-22,418	3	--	0	0	-2,266	220
Propane/Propylene .....	17,784	3,199	1,810	--	-11,022	-108	--	0	0	11,879	403
Normal Butane/Butylene .....	6,746	-570	1,277	--	-5,049	-20	--	2,439	3	-18	277
Isobutane/Isobutylene .....	3,606	-484	310	--	-3,300	-34	--	1,479	0	-1,313	143
Other Liquids .....	3,387	--	0	--	0	22	--	4,627	(s)	-1,262	4,303
Other Hydrocarbons/Oxygenates .....	843	--	0	--	0	-16	--	859	(s)	0	187
Unfinished Oils .....	--	--	0	--	0	-95	--	1,357	0	-1,262	1,838
Motor Gasoline Blend. Comp. ....	2,544	--	0	--	0	133	--	2,411	0	0	2,278
Aviation Gasoline Blend. Comp. ....	--	--	0	--	0	0	--	0	0	0	0
Finished Petroleum Products .....	-2,295	184,295	3,164	--	18,583	497	--	--	176	203,074	11,189
Finished Motor Gasoline .....	-2,295	91,497	398	--	3,364	229	--	--	27	92,709	4,635
Reformulated .....	--	0	0	--	0	0	--	--	0	0	0
Oxygenated .....	2,491	6,280	0	--	148	96	--	--	20	8,804	280
Other .....	-4,786	85,217	398	--	3,216	133	--	--	7	83,905	4,355
Finished Aviation Gasoline .....	--	206	0	--	149	-11	--	--	0	366	24
Jet Fuel .....	--	10,069	0	--	11,976	-51	--	--	0	22,096	803
Naphtha-Type .....	--	544	0	--	-453	-116	--	--	0	207	25
Kerosene-Type .....	--	9,525	0	--	12,429	65	--	--	0	21,889	778
Kerosene .....	--	1,055	0	--	-236	22	--	--	0	797	125
Distillate Fuel Oil .....	--	50,219	2,687	--	3,330	-203	--	--	0	56,439	2,891
0.05 percent sulfur and under .....	--	40,113	762	--	3,279	-179	--	--	0	44,333	2,456
Greater than 0.05 percent sulfur ..	--	10,106	1,925	--	51	-24	--	--	0	12,106	435
Residual Fuel Oil .....	--	4,722	0	--	0	-70	--	--	0	4,792	425
Petrochemical Feedstocks <sup>e</sup> .....	--	188	0	--	0	-3	--	--	0	191	0
Special Naphthas .....	--	0	0	--	0	0	--	--	3	-3	1
Lubricants .....	--	0	0	--	0	0	--	--	82	-82	0
Waxes .....	--	928	0	--	0	14	--	--	49	865	14
Petroleum Coke .....	--	4,736	0	--	0	6	--	--	3	4,727	186
Asphalt and Road Oil .....	--	12,983	79	--	0	565	--	--	14	12,483	2,066
Still Gas .....	--	7,061	0	--	0	0	--	--	0	7,061	0
Miscellaneous Products .....	--	631	0	--	0	-1	--	--	0	632	19
<b>Total .....</b>	<b>192,643</b>	<b>186,440</b>	<b>52,957</b>	<b>7,480</b>	<b>-44,645</b>	<b>-1,215</b>	<b>0</b>	<b>181,705</b>	<b>179</b>	<b>214,207</b>	<b>27,721</b>

<sup>a</sup> Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.

<sup>b</sup> Unaccounted for crude oil represents the difference between the supply and disposition of crude oil.

<sup>c</sup> A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks.

<sup>d</sup> Products supplied is equal to field production, plus refinery production, plus imports, plus unaccounted for crude oil, plus net receipts, minus stock change, minus crude losses, minus refinery inputs, minus exports.

<sup>e</sup> Includes naphtha less than 401° F endpoint and other oils equal to or greater than 401° F endpoint.

(s) = Less than 500 barrels.

LRG = Liquefied Refinery Gas.

Note: Totals may not equal sum of components due to independent rounding.

Sources: • Energy Information Administration (EIA) Forms EIA-810, "Monthly Refinery Report," EIA-811, "Monthly Bulk Terminal Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movement Report," and EIA-819M, "Monthly Oxygenate Telephone Report". • Domestic crude oil production from State conservation agencies and the Minerals Management Service of the U.S. Department of the Interior. • Export data from the Bureau of the Census and Form EIA-810, "Monthly Refinery Report."

**Table 11. PAD District IV—Daily Average Supply and Disposition of Crude Oil and Petroleum Products, 1996**  
(Thousand Barrels per Day)

Commodity	Supply					Disposition				
	Field Production	Refinery Production	Imports by PAD District of Entry <sup>a</sup>	Unaccounted For Crude Oil <sup>b</sup>	Net Receipts	Stock Change <sup>c</sup>	Crude Losses	Refinery Inputs	Exports	Products Supplied <sup>d</sup>
Crude Oil .....	365	--	125	20	-45	-4	0	469	(s)	0
Natural Gas Liquids and LRGs .....	158	6	12	--	-128	(s)	--	15	(s)	34
Pentanes Plus .....	26	--	2	--	-13	(s)	--	4	0	11
Liquefied Petroleum Gases .....	132	6	9	--	-114	(s)	--	11	(s)	23
Ethane/Ethylene .....	55	0	0	--	-61	(s)	--	0	0	-6
Propane/Propylene .....	49	9	5	--	-30	(s)	--	0	0	32
Normal Butane/Butylene .....	18	-2	3	--	-14	(s)	--	7	(s)	(s)
Isobutane/Isobutylene .....	10	-1	1	--	-9	(s)	--	4	0	-4
Other Liquids .....	9	--	0	--	0	(s)	--	13	(s)	-3
Other Hydrocarbons/Oxygenates ....	2	--	0	--	0	(s)	--	2	(s)	0
Unfinished Oils .....	--	--	0	--	0	(s)	--	4	0	-3
Motor Gasoline Blend. Comp. ....	7	--	0	--	0	(s)	--	7	0	0
Aviation Gasoline Blend. Comp. ....	--	--	0	--	0	0	--	0	0	0
Finished Petroleum Products .....	-6	504	9	--	51	1	--	--	(s)	555
Finished Motor Gasoline .....	-6	250	1	--	9	1	--	--	(s)	253
Reformulated .....	--	0	0	--	0	0	--	--	0	0
Oxygenated .....	7	17	0	--	(s)	(s)	--	--	(s)	24
Other .....	-13	233	1	--	9	(s)	--	--	(s)	229
Finished Aviation Gasoline .....	--	1	0	--	(s)	(s)	--	--	0	1
Jet Fuel .....	--	28	0	--	33	(s)	--	--	0	60
Naphtha-Type .....	--	1	0	--	-1	(s)	--	--	0	1
Kerosene-Type .....	--	26	0	--	34	(s)	--	--	0	60
Kerosene .....	--	3	0	--	-1	(s)	--	--	0	2
Distillate Fuel Oil .....	--	137	7	--	9	-1	--	--	0	154
0.05 percent sulfur and under .....	--	110	2	--	9	(s)	--	--	0	121
Greater than 0.05 percent sulfur ...	--	28	5	--	(s)	(s)	--	--	0	33
Residual Fuel Oil .....	--	13	0	--	0	(s)	--	--	0	13
Petrochemical Feedstocks <sup>e</sup> .....	--	1	0	--	0	(s)	--	--	0	1
Special Naphthas .....	--	0	0	--	0	0	--	--	(s)	(s)
Lubricants .....	--	0	0	--	0	0	--	--	(s)	(s)
Waxes .....	--	3	0	--	0	(s)	--	--	(s)	2
Petroleum Coke .....	--	13	0	--	0	(s)	--	--	(s)	13
Asphalt and Road Oil .....	--	35	(s)	--	0	2	--	--	(s)	34
Still Gas .....	--	19	0	--	0	0	--	--	0	19
Miscellaneous Products .....	--	2	0	--	0	(s)	--	--	0	2
Total .....	526	509	145	20	-122	-3	0	496	(s)	585

<sup>a</sup> Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.

<sup>b</sup> Unaccounted for crude oil represents the difference between the supply and disposition of crude oil.

<sup>c</sup> A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks.

<sup>d</sup> Products supplied is equal to field production, plus refinery production, plus imports, plus unaccounted for crude oil, plus net receipts, minus stock change, minus crude losses, minus refinery inputs, minus exports.

<sup>e</sup> Includes naphtha less than 401° F endpoint and other oils equal to or greater than 401° F endpoint.

(s) = Less than 500 barrels per day.

LRG = Liquefied Refinery Gas.

Note: Totals may not equal sum of components due to independent rounding.

Sources: • Energy Information Administration (EIA) Forms EIA-810, "Monthly Refinery Report," EIA-811, "Monthly Bulk Terminal Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movement Report," and EIA-819M, "Monthly Oxygenate Telephone Report". • Domestic crude oil production from State conservation agencies and the Minerals Management Service of the U.S. Department of the Interior. • Export data from the Bureau of the Census and Form EIA-810, "Monthly Refinery Report."



**Table 12. PAD District V—Supply, Disposition, and Ending Stocks of Crude Oil and Petroleum Products, 1996**  
(Thousand Barrels)

Commodity	Supply					Disposition					Ending Stocks
	Field Production	Refinery Production	Imports by PAD District of Entry <sup>a</sup>	Unaccounted For Crude Oil <sup>b</sup>	Net Receipts	Stock Change <sup>c</sup>	Crude Losses	Refinery Inputs	Exports	Products Supplied <sup>d</sup>	
<b>Crude Oil</b>	<b>857,970</b>	<b>--</b>	<b>136,451</b>	<b>7,990</b>	<b>-64,966</b>	<b>-13,931</b>	<b>2</b>	<b>914,683</b>	<b>34,324</b>	<b>2,367</b>	<b>61,858</b>
<b>Natural Gas Liquids and LRGs</b>	<b>42,689</b>	<b>27,634</b>	<b>525</b>	<b>--</b>	<b>0</b>	<b>-48</b>	<b>--</b>	<b>38,251</b>	<b>7,536</b>	<b>25,109</b>	<b>3,953</b>
Pentanes Plus	23,336	--	0	--	0	18	--	18,629	2	4,687	40
Liquefied Petroleum Gases	19,353	27,634	525	--	0	-66	--	19,622	7,535	20,421	3,913
Ethane/Ethylene	12	0	0	--	0	0	--	0	0	12	0
Propane/Propylene	4,096	16,350	55	--	0	-33	--	0	2,846	17,688	1,472
Normal Butane/Butylene	9,505	10,682	0	--	0	42	--	13,462	4,689	1,994	2,064
Isobutane/Isobutylene	5,740	602	470	--	0	-75	--	6,160	0	727	377
<b>Other Liquids</b>	<b>25,405</b>	<b>--</b>	<b>24,908</b>	<b>--</b>	<b>-796</b>	<b>15</b>	<b>--</b>	<b>36,769</b>	<b>455</b>	<b>12,278</b>	<b>34,263</b>
Other Hydrocarbons/Oxygenates	30,856	--	13,944	--	0	397	--	44,391	12	0	4,291
Unfinished Oils	--	--	8,448	--	-870	209	--	-4,909	0	12,278	22,945
Motor Gasoline Blend. Comp.	-5,451	--	2,516	--	74	-595	--	-2,709	443	0	7,016
Aviation Gasoline Blend. Comp.	--	--	0	--	0	4	--	-4	0	0	11
<b>Finished Petroleum Products</b>	<b>6,572</b>	<b>1,021,097</b>	<b>9,706</b>	<b>--</b>	<b>36,871</b>	<b>699</b>	<b>--</b>	<b>--</b>	<b>97,446</b>	<b>976,101</b>	<b>55,046</b>
Finished Motor Gasoline	6,572	470,858	2,872	--	28,364	1,967	--	--	3,896	502,803	21,723
Reformulated	--	300,231	1,721	--	2,157	5,656	--	--	86	298,367	10,828
Oxygenated	11,210	9,690	0	--	0	-3,343	--	--	60	24,184	4
Other	-4,638	160,937	1,151	--	26,207	-346	--	--	3,750	180,252	10,891
Finished Aviation Gasoline	--	1,604	11	--	0	38	--	--	0	1,577	571
Jet Fuel	--	162,772	2,807	--	4,168	52	--	--	7,065	162,630	7,732
Naphtha-Type	--	204	555	--	453	-192	--	--	461	943	24
Kerosene-Type	--	162,568	2,252	--	3,715	244	--	--	6,604	161,687	7,708
Kerosene	--	1,483	21	--	0	43	--	--	245	1,216	105
Distillate Fuel Oil	--	161,105	2,067	--	4,599	-889	--	--	28,690	139,970	12,853
0.05 percent sulfur and under	--	119,830	1,458	--	2,441	-299	--	--	4,636	119,392	8,951
Greater than 0.05 percent sulfur	--	41,275	609	--	2,158	-590	--	--	24,054	20,578	3,902
Residual Fuel Oil	--	80,250	1,386	--	0	147	--	--	12,406	69,083	6,331
Petrochemical Feedstocks <sup>e</sup>	--	4,370	188	--	0	95	--	--	0	4,463	285
Special Naphthas	--	706	42	--	0	-5	--	--	6,481	-5,728	45
Lubricants	--	8,790	0	--	-260	-102	--	--	1,274	7,358	1,567
Waxes	--	974	21	--	0	56	--	--	148	791	135
Petroleum Coke	--	55,507	238	--	0	-970	--	--	37,050	19,665	1,358
Asphalt and Road Oil	--	17,691	39	--	0	316	--	--	168	17,246	2,159
Still Gas	--	53,267	0	--	0	0	--	--	0	53,267	0
Miscellaneous Products	--	1,720	14	--	0	-49	--	--	25	1,758	182
<b>Total</b>	<b>932,636</b>	<b>1,048,731</b>	<b>171,590</b>	<b>7,990</b>	<b>-28,891</b>	<b>-13,265</b>	<b>2</b>	<b>989,703</b>	<b>139,762</b>	<b>1,015,854</b>	<b>155,120</b>

<sup>a</sup> Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.

<sup>b</sup> Unaccounted for crude oil represents the difference between the supply and disposition of crude oil.

<sup>c</sup> A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks.

<sup>d</sup> Products supplied is equal to field production, plus refinery production, plus imports, plus unaccounted for crude oil, plus net receipts, minus stock change, minus crude losses, minus refinery inputs, minus exports.

<sup>e</sup> Includes naphtha less than 401° F endpoint and other oils equal to or greater than 401° F endpoint.

(s) = Less than 500 barrels.

LRG = Liquefied Refinery Gas.

Note: Totals may not equal sum of components due to independent rounding.

Sources: • Energy Information Administration (EIA) Forms EIA-810, "Monthly Refinery Report," EIA-811, "Monthly Bulk Terminal Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movement Report," and EIA-819M, "Monthly Oxygenate Telephone Report". • Domestic crude oil production from State conservation agencies and the Minerals Management Service of the U.S. Department of the Interior. • Export data from the Bureau of the Census and Form EIA-810, "Monthly Refinery Report."

**Table 13. PAD District V — Daily Average Supply and Disposition of Crude Oil and Petroleum Products, 1996**  
(Thousand Barrels per Day)

Commodity	Supply					Disposition				
	Field Production	Refinery Production	Imports by PAD District of Entry <sup>a</sup>	Unaccounted For Crude Oil <sup>b</sup>	Net Receipts	Stock Change <sup>c</sup>	Crude Losses	Refinery Inputs	Exports	Products Supplied <sup>d</sup>
<b>Crude Oil</b> .....	2,344	--	373	22	-178	-38	(s)	2,499	94	6
<b>Natural Gas Liquids and LRGs</b> .....	117	76	1	--	0	(s)	--	105	21	69
Pentanes Plus .....	64	--	0	--	0	(s)	--	51	(s)	13
Liquefied Petroleum Gases .....	53	76	1	--	0	(s)	--	54	21	56
Ethane/Ethylene .....	(s)	0	0	--	0	0	--	0	0	(s)
Propane/Propylene .....	11	45	(s)	--	0	(s)	--	0	8	48
Normal Butane/Butylene .....	26	29	0	--	0	(s)	--	37	13	5
Isobutane/Isobutylene .....	16	2	1	--	0	(s)	--	17	0	2
<b>Other Liquids</b> .....	69	--	68	--	-2	(s)	--	100	1	34
Other Hydrocarbons/Oxygenates .....	84	--	38	--	0	1	--	121	(s)	0
Unfinished Oils .....	--	--	23	--	-2	1	--	-13	0	34
Motor Gasoline Blend. Comp. ....	-15	--	7	--	(s)	-2	--	-7	1	0
Aviation Gasoline Blend. Comp. ....	--	--	0	--	0	(s)	--	(s)	0	0
<b>Finished Petroleum Products</b> .....	18	2,790	27	--	101	2	--	--	266	2,667
Finished Motor Gasoline .....	18	1,286	8	--	77	5	--	--	11	1,374
Reformulated .....	--	820	5	--	6	15	--	--	(s)	815
Oxygenated .....	31	26	0	--	0	-9	--	--	(s)	66
Other .....	-13	440	3	--	72	-1	--	--	10	492
Finished Aviation Gasoline .....	--	4	(s)	--	0	(s)	--	--	0	4
Jet Fuel .....	--	445	8	--	11	(s)	--	--	19	444
Naphtha-Type .....	--	1	2	--	1	-1	--	--	1	3
Kerosene-Type .....	--	444	6	--	10	1	--	--	18	442
Kerosene .....	--	4	(s)	--	0	(s)	--	--	1	3
Distillate Fuel Oil .....	--	440	6	--	13	-2	--	--	78	382
0.05 percent sulfur and under .....	--	327	4	--	7	-1	--	--	13	326
Greater than 0.05 percent sulfur ...	--	113	2	--	6	-2	--	--	66	56
Residual Fuel Oil .....	--	219	4	--	0	(s)	--	--	34	189
Petrochemical Feedstocks <sup>e</sup> .....	--	12	1	--	0	(s)	--	--	0	12
Special Naphthas .....	--	2	(s)	--	0	(s)	--	--	18	-16
Lubricants .....	--	24	0	--	-1	(s)	--	--	3	20
Waxes .....	--	3	(s)	--	0	(s)	--	--	(s)	2
Petroleum Coke .....	--	152	1	--	0	-3	--	--	101	54
Asphalt and Road Oil .....	--	48	(s)	--	0	1	--	--	(s)	47
Still Gas .....	--	146	0	--	0	0	--	--	0	146
Miscellaneous Products .....	--	5	(s)	--	0	(s)	--	--	(s)	5
<b>Total</b> .....	2,548	2,865	469	22	-79	-36	(s)	2,704	382	2,776

<sup>a</sup> Represents the PAD District in which the material entered the United States and not necessarily where the crude oil or product is processed and/or consumed.

<sup>b</sup> Unaccounted for crude oil represents the difference between the supply and disposition of crude oil.

<sup>c</sup> A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks.

<sup>d</sup> Products supplied is equal to field production, plus refinery production, plus imports, plus unaccounted for crude oil, plus net receipts, minus stock change, minus crude losses, minus refinery inputs, minus exports.

<sup>e</sup> Includes naphtha less than 401° F endpoint and other oils equal to or greater than 401° F endpoint.

(s) = Less than 500 barrels per day.

LRG = Liquefied Refinery Gas.

Note: Totals may not equal sum of components due to independent rounding.

Sources: • Energy Information Administration (EIA) Forms EIA-810, "Monthly Refinery Report," EIA-811, "Monthly Bulk Terminal Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," EIA-814, "Monthly Imports Report," EIA-816, "Monthly Natural Gas Liquids Report," EIA-817, "Monthly Tanker and Barge Movement Report," and EIA-819M, "Monthly Oxygenate Telephone Report". • Domestic crude oil production from State conservation agencies and the Minerals Management Service of the U.S. Department of the Interior. • Export data from the Bureau of the Census and Form EIA-810, "Monthly Refinery Report."



**Table 14. Production of Crude Oil by PAD District and State, 1996**  
(Thousand Barrels)

PAD District and State	Total	Daily Average
<b>PAD District I</b> .....	<b>9,984</b>	<b>27</b>
Florida .....	6,292	17
New York .....	309	1
Pennsylvania .....	1,692	5
Virginia .....	13	(s)
West Virginia .....	1,680	5
<b>PAD District II</b> .....	<b>205,620</b>	<b>562</b>
Illinois .....	15,575	43
Indiana .....	2,523	7
Kansas .....	41,789	114
Kentucky .....	3,602	10
Michigan .....	10,835	30
Missouri .....	115	(s)
Nebraska .....	3,541	10
North Dakota .....	32,317	88
Ohio .....	8,305	23
Oklahoma .....	85,379	233
South Dakota .....	1,257	3
Tennessee .....	381	1
<b>PAD District III</b> .....	<b>1,158,804</b>	<b>3,166</b>
Alabama .....	16,868	46
Arkansas .....	8,814	24
Louisiana <sup>a</sup> .....	132,151	361
Mississippi .....	19,509	53
New Mexico .....	64,477	176
Texas <sup>a</sup> .....	543,342	1,485
Federal Offshore PAD District III .....	373,644	1,021
<b>PAD District IV</b> .....	<b>133,638</b>	<b>365</b>
Colorado .....	24,954	68
Montana .....	15,920	43
Utah .....	19,401	53
Wyoming .....	73,362	200
<b>PAD District V</b> .....	<b>857,970</b>	<b>2,344</b>
Alaska <sup>a</sup> .....	509,999	1,393
South Alaska .....	14,584	40
North Slope .....	495,416	1,354
Arizona .....	84	(s)
California <sup>a</sup> .....	282,409	772
Nevada .....	1,058	3
Federal Offshore PAD District V .....	64,419	176
<b>U.S. Total<sup>a</sup></b> .....	<b>2,366,017</b>	<b>6,465</b>

<sup>a</sup> Includes the following offshore production (thousand barrels): Alaska: State - 90,409; California: State - 20,032; Louisiana: State - 22,141; Texas: State - 1,081; U.S. Total, including Federal offshore - 571,726.

(s) = Less than 500 barrels or less than 500 barrels per day.

Note: • Crude oil production data for Arkansas, California, Colorado, Federal Offshore PAD District III, Illinois, Kansas, Louisiana, Michigan, Mississippi, Montana, Nevada, Ohio, Oklahoma, South Dakota, Texas, and Wyoming are changed from those reported in the *Petroleum Supply Monthly* during 1996. • Crude oil production data for Arkansas, Federal Offshore PAD District III, Kansas, Louisiana, Montana, New Mexico, Pennsylvania, and Utah were estimated based on first purchaser monthly crude oil volumes collected on Form EIA-182, "Domestic Crude Oil First Purchase Report." • Annual crude oil production for Michigan, New York, Ohio, and West Virginia was prorated by month based on first purchaser monthly crude oil volumes collected on Form EIA-182. • A final revision to the State data for 1996 will appear in the 1997 *Petroleum Supply Annual*. • Totals may not equal sum of components due to independent rounding.

Sources: State government agencies, U.S. Department of the Interior, Minerals Management Service and the Conservation Committee of California Oil and Gas Producers.

Revised 1995 crude oil production statistics are available in Appendix C.

**Table 15. Natural Gas Plant Net Production and Stocks of Petroleum Products by PAD and Refining Districts, 1996**  
(Thousand Barrels)

Commodity	PAD District I			PAD District II			
	East Coast	Appalachian No. 1	Total	Ind., Ill., Ky.	Minn., Wis., N. Dak., S. Dak.	Okla., Kans., Mo.	Total
Net Production							
Natural Gas Liquids .....	1,630	6,048	7,678	6,363	3,766	102,630	112,759
Pentanes Plus .....	149	736	885	1,270	1,012	13,760	16,042
Liquefied Petroleum Gases .....	1,481	5,312	6,793	5,093	2,754	88,870	96,717
Ethane .....	623	2,192	2,815	1,123	3	33,929	35,055
Propane .....	528	2,082	2,610	2,445	1,680	36,610	40,735
Normal Butane .....	330	712	1,042	826	1,071	10,553	12,450
Isobutane .....	0	326	326	699	0	7,778	8,477
Stocks							
Natural Gas Liquids .....	6	51	57	92	26	2,015	2,133
Pentanes Plus .....	0	5	5	11	7	152	170
Liquefied Petroleum Gases .....	6	46	52	81	19	1,863	1,963
Ethane .....	0	0	0	17	0	444	461
Propane .....	3	33	36	36	11	698	745
Normal Butane .....	3	7	10	13	8	573	594
Isobutane .....	0	6	6	15	0	148	163

Commodity	PAD District III						PAD Dist. IV	PAD Dist. V	U.S. Total
	Texas Inland	Texas Gulf Coast	La. Gulf Coast	N. La., Ark.	New Mexico	Total	Rocky Mt.	West Coast	
Net Production									
Natural Gas Liquids .....	225,908	50,021	96,980	8,675	67,197	448,781	57,913	42,689	669,820
Pentanes Plus .....	37,989	7,454	17,328	2,616	7,871	73,258	9,622	23,336	123,143
Liquefied Petroleum Gases .....	187,919	42,567	79,652	6,059	59,326	375,523	48,291	19,353	546,677
Ethane .....	83,936	23,626	32,745	1,126	29,945	171,378	20,155	12	229,415
Propane .....	65,322	11,950	27,951	2,611	18,965	126,799	17,784	4,096	192,024
Normal Butane .....	26,962	-19,846	9,650	1,550	6,972	25,288	6,746	9,505	55,031
Isobutane .....	11,699	26,837	9,306	772	3,444	52,058	3,606	5,740	70,207
Stocks									
Natural Gas Liquids .....	187	932	1,701	154	113	3,087	253	127	5,657
Pentanes Plus .....	70	220	459	22	16	787	101	18	1,081
Liquefied Petroleum Gases .....	117	712	1,242	132	97	2,300	152	109	4,576
Ethane .....	9	277	3	96	3	388	3	0	852
Propane .....	66	213	624	21	59	983	87	92	1,943
Normal Butane .....	29	115	386	8	27	565	46	8	1,223
Isobutane .....	13	107	229	7	8	364	16	9	558

Note: • Stocks are reported as of the end of December. • Refer to Appendix A for Refining District descriptions.  
Source: Energy Information Administration (EIA) Form EIA-816, "Monthly Natural Gas Liquids Report."



**Table 16. Refinery Input of Crude Oil and Petroleum Products by PAD and Refining Districts, 1996**  
(Thousand Barrels, Except Where Noted)

Commodity	PAD District I			PAD District II			
	East Coast	Appalachian No. 1	Total	Ind., Ill., Ky.	Minn., Wis., N. Dak., S. Dak.	Okla., Kans., Mo.	Total
<b>Crude Oil</b> .....	452,204	34,796	487,000	798,601	146,312	246,092	1,191,005
<b>Natural Gas Liquids</b> .....	1,922	0	1,922	17,916	3,903	12,808	34,627
Pentanes Plus .....	255	0	255	1,715	1,608	7,402	10,725
Liquefied Petroleum Gases .....	1,667	0	1,667	16,201	2,295	5,406	23,902
Ethane .....	0	0	0	0	0	0	0
Propane .....	0	0	0	0	0	0	0
Normal Butane .....	773	0	773	7,354	1,492	2,392	11,238
Isobutane .....	894	0	894	8,847	803	3,014	12,664
<b>Other Liquids</b> .....	109,188	1,221	110,409	28,089	6,372	-6,520	27,941
Other Hydrocarbons/Hydrogen/Oxygenates .....	22,213	4	22,217	8,396	2,198	1,302	11,896
Other Hydrocarbons/Hydrogen .....	18	0	18	283	0	252	535
Oxygenates .....	W	W	22,199	8,113	2,198	1,050	11,361
Fuel Ethanol .....	W	W	W	W	W	W	9,722
Methanol .....	W	W	W	W	W	W	W
MTBE .....	W	W	20,804	W	W	W	W
Other Oxygenates <sup>a</sup> .....	W	W	W	W	W	W	W
Unfinished Oils (net) .....	36,287	1,392	37,679	19,737	-3	-8,724	11,010
Motor Gasoline Blend. Comp. (net) .....	52,167	-175	51,992	-29	4,177	902	5,050
Aviation Gasoline Blend. Comp. (net) .....	-1,479	0	-1,479	-15	0	0	-15
<b>Total Input to Refineries</b> .....	563,314	36,017	599,331	844,606	156,587	252,380	1,253,573
<b>Atmospheric Crude Oil Distillation</b>							
Gross Input (daily average) .....	1,201	95	1,296	2,239	400	678	3,316
Operable Capacity (daily average) .....	1,347	97	1,444	2,285	396	715	3,396
Operable Utilization Rate (percent) <sup>b</sup> .....	89.2	97.9	89.8	98.0	101.0	94.9	97.7
<b>Downstream Processing</b>							
<b>Fresh Feed Input (daily average)</b>							
Catalytic Cracking .....	533	18	551	786	128	197	1,110
Catalytic Hydrocracking .....	52	4	56	128	0	6	134
Delayed and Fluid Coking .....	81	0	81	174	61	64	299
<b>Crude Oil Qualities</b>							
Sulfur Content, Weighted Average (percent) .....	0.94	0.96	0.94	1.06	1.78	0.70	1.08
API Gravity, Weighted Average (degrees) .....	31.35	35.33	31.63	34.00	29.59	36.24	33.92
<b>Operable Capacity (daily average)</b> .....	1,347	97	1,444	2,285	396	715	3,396
Operating .....	1,282	97	1,379	2,285	396	705	3,386
Idle .....	65	0	65	0	0	10	10
<b>Alaskan Crude Oil Receipts</b> .....	0	0	0	5,271	0	0	5,271

See footnotes at end of table.

**Table 16. Refinery Input of Crude Oil and Petroleum Products by PAD and Refining Districts, 1996 (Continued)**  
(Thousand Barrels, Except Where Noted)

Commodity	PAD District III						PAD Dist. IV	PAD Dist. V	U.S. Total
	Texas Inland	Texas Gulf Coast	La. Gulf Coast	N. La., Ark.	New Mexico	Total	Rocky Mt.	West Coast	
<b>Crude Oil</b> .....	205,245	1,186,198	942,026	63,082	34,322	2,430,873	171,704	914,683	5,195,265
<b>Natural Gas Liquids</b> .....	10,939	40,089	28,378	2,208	2,764	84,378	5,374	38,251	164,552
Pentanes Plus .....	5,508	16,334	6,780	1,569	1,482	31,673	1,456	18,629	62,738
Liquefied Petroleum Gases .....	5,431	23,755	21,598	639	1,282	52,705	3,918	19,622	101,814
Ethane .....	0	0	0	0	0	0	0	0	0
Propane .....	0	0	0	0	0	0	0	0	0
Normal Butane .....	4,279	8,985	11,127	174	32	24,597	2,439	13,462	52,509
Isobutane .....	1,152	14,770	10,471	465	1,250	28,108	1,479	6,160	49,305
<b>Other Liquids</b> .....	2,139	81,791	46,143	-1,928	524	128,669	4,627	36,769	308,415
Other Hydrocarbons/Hydrogen/Oxygenates .....	1,644	22,790	10,705	3	215	35,357	859	44,391	114,720
Other Hydrocarbons/Hydrogen .....	1,463	4,482	5,324	0	0	11,269	22	8,743	20,587
Oxygenates .....	181	18,308	5,381	W	W	24,088	837	35,648	94,133
Fuel Ethanol .....	W	W	W	W	W	W	W	W	11,156
Methanol .....	W	W	W	W	W	W	W	W	126
MTBE .....	W	17,184	W	W	W	22,067	W	34,512	79,407
Other Oxygenates <sup>a</sup> .....	W	W	W	W	W	W	W	W	3,444
Unfinished Oils (net) .....	572	74,312	34,057	-1,722	14	107,233	1,357	-4,909	152,370
Motor Gasoline Blend. Comp. (net) .....	-77	-15,309	1,377	-209	295	-13,923	2,411	-2,709	42,821
Aviation Gasoline Blend. Comp. (net) .....	0	-2	4	0	0	2	0	-4	-1,496
<b>Total Input to Refineries</b> .....	218,323	1,308,078	1,016,547	63,362	37,610	2,643,920	181,705	989,703	5,668,232
<b>Atmospheric Crude Oil Distillation</b>									
Gross Input (daily average) .....	564	3,242	2,593	163	94	6,656	473	2,595	14,337
Operable Capacity (daily average) .....	608	3,354	2,724	200	95	6,979	514	2,907	15,239
Operable Utilization Rate (percent) <sup>b</sup> .....	92.8	96.7	95.2	81.9	99.2	95.4	92.1	89.3	94.1
<b>Downstream Processing</b>									
<b>Fresh Feed Input (daily average)</b>									
Catalytic Cracking .....	178	1,312	909	16	30	2,445	150	694	4,950
Catalytic Hydrocracking .....	41	235	206	0	0	482	4	423	1,099
Delayed and Fluid Coking .....	5	372	392	9	0	778	36	459	1,654
<b>Crude Oil Qualities</b>									
Sulfur Content, Weighted Average (percent) .....	0.63	1.18	1.38	1.64	0.53	1.22	1.31	1.14	1.15
API Gravity, Weighted Average (degrees) .....	38.43	31.80	29.81	30.59	39.55	31.67	33.64	25.69	31.14
<b>Operable Capacity (daily average)</b> .....	608	3,354	2,724	200	95	6,979	514	2,907	15,239
Operating .....	603	3,327	2,724	200	95	6,948	513	2,840	15,066
Idle .....	5	27	0	0	0	32	1	66	173
<b>Alaskan Crude Oil Receipts</b> .....	163	2,645	725	0	107	3,640	0	493,252	502,163

<sup>a</sup> Includes ethyl tertiary butyl ether (ETBE), tertiary amyl methyl ether (TAME), tertiary butyl alcohol (TBA), and other aliphatic alcohols and ethers intended for motor gasoline blending (e.g., isopropyl ether (IPE) or n-propanol).

<sup>b</sup> Represents gross input divided by operable capacity.

W = Withheld to avoid disclosure of individual company data.

Note: • Totals may not equal sum of components due to independent rounding. • Refer to Appendix A for Refining District descriptions.

Source: Energy Information Administration (EIA) Form EIA-810, "Monthly Refinery Report."



**Table 17. Refinery Net Production of Finished Petroleum Products by PAD and Refining Districts, 1996**  
(Thousand Barrels)

Commodity	PAD District I			PAD District II			
	East Coast	Appalachian No. 1	Total	Ind., Ill., Ky.	Minn., Wis., N. Dak., S. Dak.	Okla., Kans., Mo.	Total
Liquefied Refinery Gases .....	15,509	252	15,761	34,971	3,988	7,150	46,109
Ethane/Ethylene .....	0	0	0	0	0	0	0
Ethane .....	W	W	W	W	W	W	W
Ethylene .....	W	W	W	W	W	W	W
Propane/Propylene .....	15,298	430	15,728	30,204	3,642	7,551	41,397
Propane .....	W	W	W	W	W	W	W
Propylene .....	W	W	W	W	W	W	W
Normal Butane/Butylene .....	-38	-132	-170	3,556	306	68	3,930
Normal Butane .....	W	W	W	W	W	W	W
Butylene .....	W	W	W	W	W	W	W
Isobutane/Isobutylene .....	249	-46	203	1,211	40	-469	782
Isobutane .....	W	W	W	W	W	W	W
Isobutylene .....	W	W	W	W	W	W	W
Finished Motor Gasoline .....	295,551	13,166	308,717	446,141	84,522	131,931	662,594
Reformulated .....	203,195	0	203,195	76,004	10,951	0	86,955
Oxygenated .....	0	0	0	9,170	14,935	601	24,706
Other .....	92,356	13,166	105,522	360,967	58,636	131,330	550,933
Finished Aviation Gasoline .....	85	0	85	785	295	320	1,400
Jet Fuel .....	25,852	439	26,291	53,439	10,809	12,825	77,073
Naphtha-Type .....	0	0	0	13	0	0	13
Kerosene-Type .....	25,852	439	26,291	53,426	10,809	12,825	77,060
Commercial .....	25,852	339	26,191	50,821	9,912	11,782	72,515
Military .....	0	100	100	2,605	897	1,043	4,545
Kerosene .....	1,960	957	2,917	5,747	962	1,444	8,153
Distillate Fuel Oil .....	131,142	9,283	140,425	192,447	36,422	73,102	301,971
0.05 percent sulfur and under .....	40,036	7,635	47,671	128,370	27,471	52,992	208,833
Greater than 0.05 percent sulfur .....	91,106	1,648	92,754	64,077	8,951	20,110	93,138
Residual Fuel Oil .....	46,166	977	47,143	16,751	3,679	1,158	21,588
Less than 0.31 percent sulfur .....	17,042	490	17,532	47	0	2	49
0.31 to 1.00 percent sulfur .....	23,262	487	23,749	5,778	0	25	5,803
Greater than 1.00 percent sulfur .....	5,862	0	5,862	10,926	3,679	1,131	15,736
Naphtha for Petrochemical Feedstock Use .....	3,362	0	3,362	5,982	0	323	6,305
Other Oils for Petrochemical Feedstock Use .....	0	0	0	6,975	0	791	7,766
Special Naphthas .....	601	276	877	3,846	0	852	4,698
Lubricants .....	4,396	2,978	7,374	5,474	0	2,903	8,377
Naphthenic .....	0	0	0	6	0	0	6
Paraffinic .....	4,396	2,978	7,374	5,468	0	2,903	8,371
Waxes .....	0	1,861	1,861	685	0	431	1,116
Petroleum Coke .....	17,073	280	17,353	31,681	8,820	9,492	49,993
Marketable .....	6,998	0	6,998	18,816	6,717	6,703	32,236
Catalyst .....	10,075	280	10,355	12,865	2,103	2,789	17,757
Asphalt and Road Oil .....	24,657	4,246	28,903	47,211	10,606	8,311	66,128
Still Gas .....	19,076	1,350	20,426	32,153	5,215	10,270	47,638
Miscellaneous Products .....	274	433	707	2,074	797	682	3,553
Fuel Use .....	0	0	0	0	0	0	0
Nonfuel Use .....	274	433	707	2,074	797	682	3,553
<b>Total .....</b>	<b>585,704</b>	<b>36,498</b>	<b>622,202</b>	<b>886,362</b>	<b>166,115</b>	<b>261,985</b>	<b>1,314,462</b>
Processing Gain(-) or Loss(+) <sup>a</sup> .....	-22,390	-481	-22,871	-41,756	-9,528	-9,605	-60,889

See footnotes at end of table.

**Table 17. Refinery Net Production of Finished Petroleum Products by PAD and Refining Districts, 1996 (Continued)**  
(Thousand Barrels)

Commodity	PAD District III						PAD Dist.	PAD Dist.	U.S. Total
	Texas Inland	Texas Gulf Coast	La. Gulf Coast	N. La., Ark.	New Mexico	Total	IV	V	
							Rocky Mt.	West Coast	
Liquefied Refinery Gases .....	7,718	89,861	51,626	720	891	150,816	2,145	27,634	242,465
Ethane/Ethylene .....	15	8,967	1,572	0	0	10,554	0	0	10,554
Ethane .....	W	W	W	W	W	W	W	W	8,172
Ethylene .....	W	W	W	W	W	W	W	W	2,382
Propane/Propylene .....	6,948	61,174	44,124	497	767	113,510	3,199	16,350	190,184
Propane .....	W	W	W	W	W	W	W	W	135,110
Propylene .....	W	W	W	W	W	W	W	W	55,074
Normal Butane/Butylene .....	1,112	17,322	5,058	223	82	23,797	-570	10,682	37,669
Normal Butane .....	W	W	W	W	W	W	W	W	37,843
Butylene .....	W	W	W	W	W	W	W	W	-174
Isobutane/Isobutylene .....	-357	2,398	872	0	42	2,955	-484	602	4,058
Isobutane .....	W	W	W	W	W	W	W	W	2,727
Isobutylene .....	W	W	W	W	W	W	W	W	1,331
Finished Motor Gasoline .....	120,195	612,192	466,388	14,451	21,727	1,234,953	91,497	470,858	2,768,619
Reformulated .....	9,130	169,004	44,235	0	0	222,369	0	300,231	812,750
Oxygenated .....	209	0	486	0	205	900	6,280	9,690	41,576
Other .....	110,856	443,188	421,667	14,451	21,522	1,011,684	85,217	160,937	1,914,293
Finished Aviation Gasoline .....	1,478	1,304	1,202	0	0	3,984	206	1,604	7,279
Jet Fuel .....	18,647	126,045	127,558	3,299	2,743	278,292	10,069	162,772	554,497
Naphtha-Type .....	7	0	0	0	0	7	544	204	768
Kerosene-Type .....	18,640	126,045	127,558	3,299	2,743	278,285	9,525	162,568	553,729
Commercial .....	12,716	110,905	116,325	2,637	0	242,583	7,652	143,321	492,262
Military .....	5,924	15,140	11,233	662	2,743	35,702	1,873	19,247	61,467
Kerosene .....	18	7,475	1,111	512	34	9,150	1,055	1,483	22,758
Distillate Fuel Oil .....	52,280	260,242	222,535	15,746	9,040	559,843	50,219	161,105	1,213,563
0.05 percent sulfur and under .....	37,059	174,029	118,400	7,972	8,726	346,186	40,113	119,830	762,633
Greater than 0.05 percent sulfur .....	15,221	86,213	104,135	7,774	314	213,657	10,106	41,275	450,930
Residual Fuel Oil .....	3,477	56,559	48,934	2,596	275	111,841	4,722	80,250	265,544
Less than 0.31 percent sulfur .....	1,535	34	3,419	0	0	4,988	1,090	2,040	25,699
0.31 to 1.00 percent sulfur .....	1,099	10,258	12,120	2,290	275	26,042	1,072	15,158	71,824
Greater than 1.00 percent sulfur .....	843	46,267	33,395	306	0	80,811	2,560	63,052	168,021
Naphtha for Petrochemical Feedstock Use .....	1,212	47,456	10,847	0	3	59,518	0	875	70,060
Other Oils for Petrochemical Feedstock Use .....	1,672	34,048	26,054	0	0	61,774	188	3,495	73,223
Special Naphthas .....	1,074	7,743	1,581	1,527	0	11,925	0	706	18,206
Lubricants .....	W	21,453	W	W	W	38,805	0	8,790	63,346
Naphthenic .....	W	4,703	W	W	W	11,214	0	3,385	14,605
Paraffinic .....	W	16,750	W	W	W	27,591	0	5,405	48,741
Waxes .....	83	2,450	1,045	923	0	4,501	928	974	9,380
Petroleum Coke .....	3,694	58,495	52,057	921	229	115,396	4,736	55,507	242,985
Marketable .....	513	35,436	38,488	704	0	75,141	2,427	42,049	158,851
Catalyst .....	3,181	23,059	13,569	217	229	40,255	2,309	13,458	84,134
Asphalt and Road Oil .....	5,956	10,343	10,959	13,103	1,757	42,118	12,983	17,691	167,823
Still Gas .....	8,621	59,084	40,365	1,897	1,156	111,123	7,061	53,267	239,515
Miscellaneous Products .....	863	3,641	4,297	0	0	8,801	631	1,720	15,412
Fuel Use .....	251	0	1,136	0	0	1,387	0	-217	1,170
Nonfuel Use .....	612	3,641	3,161	0	0	7,414	631	1,937	14,242
<b>Total .....</b>	<b>227,481</b>	<b>1,398,391</b>	<b>1,075,538</b>	<b>63,575</b>	<b>37,855</b>	<b>2,802,840</b>	<b>186,440</b>	<b>1,048,731</b>	<b>5,974,675</b>
Processing Gain(-) or Loss(+) <sup>a</sup> .....	-9,158	-90,313	-58,991	-213	-245	-158,920	-4,735	-59,028	-306,443

<sup>a</sup> Represents the arithmetic difference between input and production.

W = Withheld to avoid disclosure of individual company data.

Note: Refer to Appendix A for refining District descriptions.

Source: Energy Information Administration (EIA) Form EIA-810, "Monthly Refinery Report."



**Table 18. Refinery Stocks of Crude Oil and Petroleum Products by PAD and Refining Districts, 1996**  
(Thousand Barrels)

Commodity	PAD District I			PAD District II			
	East Coast	Appalachian No. 1	Total	Ind., Ill., Ky.	Minn., Wis., N. Dak., S. Dak.	Okla., Kans., Mo.	Total
<b>Crude Oil</b> .....	<b>12,035</b>	<b>501</b>	<b>12,536</b>	<b>8,398</b>	<b>1,706</b>	<b>2,101</b>	<b>12,205</b>
<b>Petroleum Products</b> .....	<b>44,777</b>	<b>2,610</b>	<b>47,387</b>	<b>35,429</b>	<b>7,398</b>	<b>11,120</b>	<b>53,947</b>
Pentanes Plus .....	0	0	0	4	194	142	340
Liquefied Petroleum Gases .....	1,577	17	1,594	2,447	359	532	3,338
Ethane/Ethylene .....	0	0	0	2	0	0	2
Propane/Propylene .....	794	7	801	1,191	20	249	1,460
Normal Butane/Butylene .....	610	6	616	915	243	176	1,334
Isobutane/Isobutylene .....	173	4	177	339	96	107	542
Other Hydrocarbons/Hydrogen/Oxygenates .....	1,657	9	1,666	347	90	78	515
Other Hydrocarbons/Hydrogen .....	0	0	0	16	0	0	16
Oxygenates .....	W	W	1,666	331	90	78	499
Fuel Ethanol .....	W	W	W	W	W	W	266
Methanol .....	W	W	W	W	W	W	W
MTBE .....	W	W	1,240	W	W	W	W
Other Oxygenates <sup>a</sup> .....	W	W	W	W	W	W	W
Unfinished Oils .....	9,062	703	9,765	8,038	484	3,312	11,834
Naphthas and Lighter .....	1,510	182	1,692	1,917	170	668	2,755
Kerosene and Light Gas Oils .....	2,039	5	2,044	1,463	95	254	1,812
Heavy Gas Oils .....	4,342	404	4,746	2,852	217	1,148	4,217
Residuum .....	1,171	112	1,283	1,806	2	1,242	3,050
Motor Gasoline Blending Components .....	6,211	101	6,312	5,559	821	977	7,357
Aviation Gasoline Blending Components .....	193	0	193	28	0	0	28
Finished Motor Gasoline .....	7,707	260	7,967	5,000	1,389	1,957	8,346
Reformulated .....	5,310	0	5,310	305	84	0	389
Oxygenated .....	0	0	0	341	267	0	608
Other .....	2,397	260	2,657	4,354	1,038	1,957	7,349
Finished Aviation Gasoline .....	610	0	610	42	47	67	156
Jet Fuel .....	1,150	23	1,173	2,191	149	465	2,805
Naphtha-Type .....	0	0	0	0	0	0	0
Kerosene-Type .....	1,150	23	1,173	2,191	149	465	2,805
Kerosene .....	520	75	595	384	47	78	509
Distillate Fuel Oil .....	7,718	356	8,074	5,572	1,468	2,016	9,056
0.05 percent sulfur and under .....	2,145	306	2,451	3,404	709	1,081	5,194
Greater than 0.05 percent sulfur .....	5,573	50	5,623	2,168	759	935	3,862
Residual Fuel Oil .....	5,628	65	5,693	951	224	87	1,262
Less than 0.31 percent sulfur .....	2,498	51	2,549	6	0	0	6
0.31 to 1.00 percent sulfur .....	1,953	14	1,967	187	0	1	188
Greater than 1.00 percent sulfur .....	1,177	0	1,177	758	224	86	1,068
Naphtha for Petrochemical Feedstock Use .....	381	0	381	207	0	6	213
Other Oils for Petrochemical Feedstock Use .....	0	0	0	0	0	0	0
Special Naphthas .....	79	18	97	185	0	43	228
Lubricants .....	686	303	989	785	0	0	785
Waxes .....	0	212	212	127	0	38	165
Petroleum Coke (Marketable) .....	473	0	473	588	647	288	1,523
Asphalt and Road Oil .....	1,122	417	1,539	2,882	1,472	1,014	5,368
Miscellaneous Products .....	3	51	54	92	7	20	119
<b>Total Stocks, All Oils</b> .....	<b>56,812</b>	<b>3,111</b>	<b>59,923</b>	<b>43,827</b>	<b>9,104</b>	<b>13,221</b>	<b>66,152</b>

See footnotes at end of table.

**Table 18. Refinery Stocks of Crude Oil and Petroleum Products by PAD and Refining Districts, 1996 (Continued)**  
(Thousand Barrels)

Commodity	PAD District III						PAD Dist.	PAD Dist.	U.S. Total
	Texas Inland	Texas Gulf Coast	La. Gulf Coast	N. La., Ark.	New Mexico	Total	IV	V	
							Rocky Mt.	West Coast	
Crude Oil .....	912	19,239	15,902	1,042	414	37,509	2,065	19,602	83,917
<b>Petroleum Products .....</b>	<b>9,572</b>	<b>64,772</b>	<b>48,356</b>	<b>4,270</b>	<b>1,477</b>	<b>128,447</b>	<b>11,253</b>	<b>65,077</b>	<b>306,111</b>
Pentanes Plus .....	88	49	55	8	15	215	1	0	556
Liquefied Petroleum Gases .....	1,717	2,723	3,217	15	39	7,711	321	1,171	14,135
Ethane/Ethylene .....	88	418	0	0	0	506	0	0	508
Propane/Propylene .....	908	1,219	1,170	3	5	3,305	76	134	5,776
Normal Butane/Butylene .....	440	566	1,561	3	15	2,585	156	693	5,384
Isobutane/Isobutylene .....	281	520	486	9	19	1,315	89	344	2,467
Other Hydrocarbons/Hydrogen/Oxygenates .....	33	1,693	754	11	32	2,523	93	3,274	8,071
Other Hydrocarbons/Hydrogen .....	0	0	1	0	0	1	0	7	24
Oxygenates .....	33	1,693	753	W	W	2,522	93	3,267	8,047
Fuel Ethanol .....	W	W	W	W	W	W	W	W	406
Methanol .....	W	W	W	W	W	W	W	W	688
MTBE .....	W	1,427	W	W	W	2,116	W	3,225	6,832
Other Oxygenates <sup>a</sup> .....	W	W	W	W	W	W	W	W	121
Unfinished Oils .....	1,892	21,828	16,402	937	419	41,478	1,838	22,945	87,860
Naphthas and Lighter .....	683	4,865	3,269	288	235	9,340	388	3,754	17,929
Kerosene and Light Gas Oils .....	339	2,963	2,482	145	79	6,008	341	4,401	14,606
Heavy Gas Oils .....	495	8,815	7,478	439	105	17,332	834	11,908	39,037
Residuum .....	375	5,185	3,173	65	0	8,798	275	2,882	16,288
Motor Gasoline Blending Components .....	1,175	5,797	5,028	57	350	12,407	2,275	6,944	35,295
Aviation Gasoline Blending Components .....	0	0	22	0	0	22	0	11	254
Finished Motor Gasoline .....	1,790	9,758	5,788	267	133	17,736	2,272	10,221	46,542
Reformulated .....	133	2,598	558	0	0	3,289	0	5,579	14,567
Oxygenated .....	0	0	0	0	0	0	123	0	731
Other .....	1,657	7,160	5,230	267	133	14,447	2,149	4,642	31,244
Finished Aviation Gasoline .....	71	104	171	0	0	346	24	299	1,435
Jet Fuel .....	467	3,392	2,233	115	61	6,268	345	4,132	14,723
Naphtha-Type .....	0	0	0	0	0	0	0	24	24
Kerosene-Type .....	467	3,392	2,233	115	61	6,268	345	4,108	14,699
Kerosene .....	16	210	127	32	28	413	80	92	1,689
Distillate Fuel Oil .....	1,188	8,684	5,988	493	181	16,534	1,661	6,673	41,998
0.05 percent sulfur and under .....	677	3,441	2,386	284	126	6,914	1,316	4,774	20,649
Greater than 0.05 percent sulfur .....	511	5,243	3,602	209	55	9,620	345	1,899	21,349
Residual Fuel Oil .....	244	3,025	2,670	131	8	6,078	425	4,389	17,847
Less than 0.31 percent sulfur .....	44	1	59	0	0	104	11	403	3,073
0.31 to 1.00 percent sulfur .....	64	518	760	90	8	1,440	317	755	4,667
Greater than 1.00 percent sulfur .....	136	2,506	1,851	41	0	4,534	97	3,231	10,107
Naphtha for Petrochemical Feedstock Use .....	22	659	361	0	22	1,064	0	115	1,773
Other Oils for Petrochemical Feedstock Use .....	95	925	237	0	0	1,257	0	170	1,427
Special Naphthas .....	63	1,045	56	120	0	1,284	1	45	1,655
Lubricants .....	30	3,276	1,647	882	0	5,835	0	1,086	8,695
Waxes .....	6	202	137	43	0	388	14	135	914
Petroleum Coke (Marketable) .....	0	745	2,395	0	0	3,140	186	1,358	6,680
Asphalt and Road Oil .....	659	492	946	1,159	189	3,445	1,717	1,854	13,923
Miscellaneous Products .....	16	165	122	0	0	303	0	163	639
<b>Total Stocks, All Oils .....</b>	<b>10,484</b>	<b>84,011</b>	<b>64,258</b>	<b>5,312</b>	<b>1,891</b>	<b>165,956</b>	<b>13,318</b>	<b>84,679</b>	<b>390,028</b>

<sup>a</sup> Includes ethyl tertiary butyl ether (ETBE), tertiary amyl methyl ether (TAME), tertiary butyl alcohol (TBA), and other aliphatic alcohols and ethers intended for motor gasoline blending (e.g., isopropyl ether (IPE) or n-propanol).

W = Withheld to avoid disclosure of individual company data.

Notes: • Stocks are reported as of the end of December. • Refer to Appendix A for Refining District descriptions.

Source: Energy Information Administration (EIA) Form EIA-810, "Monthly Refinery Report."



Table 19. Percent Refinery Yield of Petroleum Products by PAD and Refining Districts,<sup>a</sup> 1996

Commodity	PAD District I			PAD District II			
	East Coast	Appalachian No. 1	Total	Ind., Ill., Ky.	Minn., Wis., N. Dak., S. Dak.	Okla., Kans., Mo.	Total
Liquefied Refinery Gases .....	3.2	0.7	3.0	4.3	2.7	3.0	3.8
Finished Motor Gasoline <sup>b</sup> .....	44.9	36.9	44.3	51.3	50.7	49.3	50.8
Finished Aviation Gasoline <sup>c</sup> .....	0.3	0.0	0.3	0.1	0.2	0.1	0.1
Naphtha-Type Jet Fuel .....	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Kerosene-Type Jet Fuel .....	5.3	1.2	5.0	6.5	7.4	5.4	6.4
Kerosene .....	0.4	2.6	0.6	0.7	0.7	0.6	0.7
Distillate Fuel Oil .....	26.8	25.7	26.8	23.5	24.9	30.8	25.1
Residual Fuel Oil .....	9.5	2.7	9.0	2.0	2.5	0.5	1.8
Naphtha for Petrochemical Feedstock Use .....	0.7	0.0	0.6	0.7	0.0	0.1	0.5
Other Oils for Petrochemical Feedstock Use .....	0.0	0.0	0.0	0.9	0.0	0.3	0.6
Special Naphthas .....	0.1	0.8	0.2	0.5	0.0	0.4	0.4
Lubricants .....	0.9	8.2	1.4	0.7	0.0	1.2	0.7
Waxes .....	0.0	5.1	0.4	0.1	0.0	0.2	0.1
Petroleum Coke .....	3.5	0.8	3.3	3.9	6.0	4.0	4.2
Asphalt and Road Oil .....	5.0	11.7	5.5	5.8	7.2	3.5	5.5
Still Gas .....	3.9	3.7	3.9	3.9	3.6	4.3	4.0
Miscellaneous Products .....	0.1	1.2	0.1	0.3	0.5	0.3	0.3
Processing Gain(-) or Loss(+) <sup>d</sup> .....	-4.6	-1.3	-4.4	-5.1	-6.5	-4.0	-5.1

Commodity	PAD District III						PAD Dist. IV	PAD Dist. V	U.S. Total
	Texas Inland	Texas Gulf Coast	La. Gulf Coast	N. La., Ark.	New Mexico	Total	Rocky Mt.	West Coast	
Liquefied Refinery Gases .....	3.7	7.1	5.3	1.2	2.6	5.9	1.2	3.0	4.5
Finished Motor Gasoline <sup>b</sup> .....	52.3	44.8	43.6	20.3	53.7	44.5	47.9	43.0	45.7
Finished Aviation Gasoline <sup>c</sup> .....	0.7	0.1	0.1	0.0	0.0	0.2	0.1	0.2	0.2
Naphtha-Type Jet Fuel .....	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0
Kerosene-Type Jet Fuel .....	9.1	10.0	13.1	5.4	8.0	11.0	5.5	17.9	10.4
Kerosene .....	0.0	0.6	0.1	0.8	0.1	0.4	0.6	0.2	0.4
Distillate Fuel Oil .....	25.4	20.6	22.8	25.7	26.3	22.1	29.0	17.7	22.7
Residual Fuel Oil .....	1.7	4.5	5.0	4.2	0.8	4.4	2.7	8.8	5.0
Naphtha for Petrochemical Feedstock Use .....	0.6	3.8	1.1	0.0	0.0	2.3	0.0	0.1	1.3
Other Oils for Petrochemical Feedstock Use .....	0.8	2.7	2.7	0.0	0.0	2.4	0.1	0.4	1.4
Special Naphthas .....	0.5	0.6	0.2	2.5	0.0	0.5	0.0	0.1	0.3
Lubricants .....	0.2	1.7	0.9	12.8	0.0	1.5	0.0	1.0	1.2
Waxes .....	0.0	0.2	0.1	1.5	0.0	0.2	0.5	0.1	0.2
Petroleum Coke .....	1.8	4.6	5.3	1.5	0.7	4.5	2.7	6.1	4.5
Asphalt and Road Oil .....	2.9	0.8	1.1	21.4	5.1	1.7	7.5	1.9	3.1
Still Gas .....	4.2	4.7	4.1	3.1	3.4	4.4	4.1	5.9	4.5
Miscellaneous Products .....	0.4	0.3	0.4	0.0	0.0	0.3	0.4	0.2	0.3
Processing Gain(-) or Loss(+) <sup>d</sup> .....	-4.4	-7.2	-6.0	-0.3	-0.7	-6.3	-2.7	-6.5	-5.7

<sup>a</sup> Based on crude oil input and net reruns of unfinished oils.<sup>b</sup> Based on total finished motor gasoline output minus net input of motor gasoline blending components, minus input of natural gas plant liquids, other hydrocarbons and oxygenates.<sup>c</sup> Based on finished aviation gasoline output minus net input of aviation gasoline blending components.<sup>d</sup> Represents the difference between input and production.

Notes: • Totals may not equal sum of components due to independent rounding. • Refer to Appendix A for Refining District descriptions.

Sources: Calculated from data on Tables 16 and 17.

**Table 20. Imports of Crude Oil and Petroleum Products by PAD District, 1996**  
(Thousand Barrels)

Commodity	Petroleum Administration for Defense Districts						Daily Average
	I	II	III	IV	V	U.S. Total	
<b>Crude Oil<sup>a,b</sup></b>	<b>465,120</b>	<b>514,622</b>	<b>1,586,075</b>	<b>45,571</b>	<b>136,451</b>	<b>2,747,839</b>	<b>7,508</b>
<b>Natural Gas Liquids</b>	<b>11,052</b>	<b>23,399</b>	<b>38,088</b>	<b>4,222</b>	<b>525</b>	<b>77,286</b>	<b>211</b>
Pentanes Plus	143	176	15,412	825	0	16,556	45
Liquefied Petroleum Gases	10,909	23,223	22,676	3,397	525	60,730	166
Ethane	0	3	5,284	0	0	5,287	14
Ethylene	0	128	0	0	0	128	(s)
Propane	10,529	17,796	11,075	1,810	55	41,265	113
Propylene	0	2,471	0	0	0	2,471	7
Normal Butane	329	1,643	3,562	1,277	0	6,811	19
Butylene	0	0	67	0	0	67	(s)
Isobutane	51	1,182	2,688	310	470	4,701	13
Isobutylene	0	0	0	0	0	0	0
<b>Other Liquids</b>	<b>83,893</b>	<b>456</b>	<b>104,677</b>	<b>0</b>	<b>24,908</b>	<b>213,934</b>	<b>585</b>
Other Hydrocarbons/Hydrogen/Oxygenates	3,766	38	850	0	13,944	18,598	51
Other Hydrocarbons/Hydrogen	0	38	147	0	0	185	1
Oxygenates	3,766	0	703	0	13,944	18,413	50
Fuel Ethanol	47	0	75	0	191	313	1
MTBE	3,682	0	27	0	13,753	17,462	48
Other Oxygenates <sup>c</sup>	37	0	601	0	0	638	2
Unfinished Oils <sup>a</sup>	21,976	230	103,747	0	8,448	134,401	367
Naphthas and Lighter	1,778	54	17,162	0	929	19,923	54
Kerosene and Light Gas Oils	0	0	288	0	863	1,151	3
Heavy Gas Oils	13,935	176	47,861	0	1,299	63,271	173
Residuum	6,263	0	38,436	0	5,357	50,056	137
Motor Gasoline Blending Components	58,151	188	80	0	2,516	60,935	166
Aviation Gasoline Blending Components	0	0	0	0	0	0	0
<b>Finished Petroleum Products</b>	<b>331,565</b>	<b>4,973</b>	<b>80,661</b>	<b>3,164</b>	<b>9,706</b>	<b>430,069</b>	<b>1,175</b>
Finished Motor Gasoline	116,685	1,153	1,991	398	2,872	123,099	336
Reformulated	60,924	0	904	0	1,721	63,549	174
Oxygenated	0	0	0	0	0	0	0
Other	55,761	1,153	1,087	398	1,151	59,550	163
Finished Aviation Gasoline	9	29	0	0	11	49	(s)
Jet Fuel	36,592	0	1,162	0	2,807	40,561	111
Naphtha-Type	55	0	0	0	555	610	2
Kerosene-Type	36,537	0	1,162	0	2,252	39,951	109
Bonded Aircraft Fuel	21,087	0	956	0	21	22,064	60
Other	15,450	0	206	0	2,231	17,887	49
Kerosene	431	0	0	0	21	452	1
Distillate Fuel Oil	77,259	2,180	41	2,687	2,067	84,234	230
Bonded Ship Bunkers	0	0	0	6	507	513	1
0.05 percent sulfur and under	0	0	0	6	0	6	(s)
Greater than 0.05 percent sulfur	0	0	0	0	507	507	1
Other	77,259	2,180	41	2,681	1,560	83,721	229
0.05 percent sulfur and under	37,163	1,584	0	756	1,458	40,961	112
Greater than 0.05 percent sulfur	40,096	596	41	1,925	102	42,760	117
Residual Fuel Oil	82,043	109	7,316	0	1,386	90,854	248
Bonded Ship Bunkers	0	0	0	0	0	0	0
Less than 0.31 percent sulfur	0	0	0	0	0	0	0
0.31 to 1.00 percent sulfur	0	0	0	0	0	0	0
Greater than 1.00 percent sulfur	0	0	0	0	0	0	0
Other	82,043	109	7,316	0	1,386	90,854	248
Less than 0.31 percent sulfur	16,343	109	1,744	0	699	18,895	52
0.31 to 1.00 percent sulfur	19,010	0	2,180	0	470	21,660	59
Greater than 1.00 percent sulfur	46,690	0	3,392	0	217	50,299	137
Naphtha for Petrochemical Feedstock Use	3,427	399	16,257	0	148	20,231	55
Other Oils for Petrochemical Feedstock Use	0	0	51,990	0	40	52,030	142
Special Naphthas	1,932	212	1,271	0	42	3,457	9
Lubricants	3,821	263	101	0	0	4,185	11
Waxes	260	172	15	0	21	468	1
Petroleum Coke	129	0	143	0	238	510	1
Asphalt and Road Oil	8,954	416	345	79	39	9,833	27
Miscellaneous Products	23	40	29	0	14	106	(s)
<b>Total</b>	<b>891,630</b>	<b>543,450</b>	<b>1,809,501</b>	<b>52,957</b>	<b>171,590</b>	<b>3,469,128</b>	<b>9,478</b>

<sup>a</sup> Crude oil and unfinished oils are reported by the PAD District in which they are to be processed; all other products are reported by the PAD District of entry.

<sup>b</sup> Includes crude oil imported for storage in the Strategic Petroleum Reserve.

<sup>c</sup> Includes ethyl tertiary butyl ether (ETBE), tertiary amyl methyl ether (TAME), tertiary butyl alcohol (TBA), and other aliphatic alcohols and ethers intended for motor gasoline blending (e.g., isopropyl ether (IPE) or n-propanol).

(s) = Less than 500 barrels per day.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration (EIA) Form EIA-814, "Monthly Imports Report."



**Table 21. Imports of Crude Oil and Petroleum Products into the United States by Country of Origin,<sup>a</sup> 1996**  
(Thousand Barrels)

Country of Origin	Crude Oil <sup>b</sup>	Liquefied Petroleum Gases	Unfinished Oils	Gasoline Blending Components	Finished Motor Gasoline	Jet Fuel	Distillate Fuel Oil	Residual Fuel Oil	Kerosene	Special Naphthas
<b>Arab OPEC</b> .....	<b>547,390</b>	<b>13,219</b>	<b>31,572</b>	<b>1,318</b>	<b>7,571</b>	<b>259</b>	<b>433</b>	<b>11,247</b>	<b>0</b>	<b>0</b>
Algeria .....	2,964	11,231	11,598	1,225	0	158	433	8,990	0	0
Iraq .....	423	0	0	0	0	0	0	0	0	0
Kuwait .....	86,127	0	0	0	0	101	0	0	0	0
Saudi Arabia .....	456,896	1,988	19,974	93	7,571	0	0	2,257	0	0
United Arab Emirates .....	980	0	0	0	0	0	0	0	0	0
<b>Other OPEC</b> .....	<b>710,817</b>	<b>3,510</b>	<b>35,677</b>	<b>12,217</b>	<b>17,258</b>	<b>17,974</b>	<b>19,079</b>	<b>31,739</b>	<b>0</b>	<b>0</b>
Indonesia .....	16,155	0	2,046	0	0	103	0	3,352	0	0
Nigeria .....	217,911	0	2,684	163	0	0	0	4,969	0	0
Venezuela .....	476,751	3,510	30,947	12,054	17,258	17,871	19,079	23,418	0	0
<b>Non OPEC</b> .....	<b>1,489,632</b>	<b>44,001</b>	<b>67,152</b>	<b>47,400</b>	<b>98,270</b>	<b>22,328</b>	<b>64,722</b>	<b>47,868</b>	<b>452</b>	<b>3,457</b>
Angola .....	125,845	0	749	60	0	0	330	1,645	0	0
Argentina .....	16,311	0	1,364	1,343	86	0	30	709	0	0
Australia .....	8,976	0	0	0	0	0	0	0	0	0
Bahama Islands .....	0	0	0	0	0	0	0	408	0	0
Belgium .....	0	0	3,876	2,134	979	0	0	330	0	0
Benin .....	634	0	0	0	0	0	0	0	0	0
Brazil .....	0	0	230	1,549	1,212	0	0	220	0	121
Cameroon .....	748	0	252	0	0	0	0	669	0	0
Canada .....	393,571	37,595	2,172	2,438	31,654	996	32,341	7,699	452	3,170
China, People's Republic of .....	21,030	0	0	0	0	0	0	0	0	0
Colombia .....	82,796	0	198	0	97	328	0	2,055	0	0
Congo .....	11,963	0	0	0	0	0	0	0	0	0
Ecuador .....	35,203	0	1,148	0	0	0	0	1,426	0	0
Egypt .....	13,852	0	798	266	0	0	0	265	0	0
France .....	0	0	981	3,521	754	0	0	0	0	0
Gabon .....	67,475	0	0	0	0	0	0	0	0	0
Germany, FR .....	0	0	3,196	260	318	0	459	877	0	0
Greece .....	0	0	612	0	0	0	0	0	0	0
Guatemala .....	4,562	0	0	0	0	0	0	0	0	0
India .....	0	0	526	0	0	0	0	0	0	0
Italy .....	0	0	313	1,170	865	0	0	476	0	31
Ivory Coast .....	0	0	837	0	0	0	0	756	0	0
Japan .....	0	0	0	0	0	0	0	0	0	0
Korea, Republic of .....	0	0	3,188	103	0	101	0	0	0	0
Malaysia .....	2,064	0	1,702	0	0	0	0	0	0	0
Mexico .....	441,632	2,776	1,896	1,791	0	1,176	41	0	0	85
Netherlands .....	0	0	701	2,365	2,234	0	0	0	0	0
Netherlands Antilles .....	0	0	10,335	311	568	5,762	375	2,350	0	50
New Zealand .....	0	0	0	0	0	0	0	0	0	0
Norway .....	107,223	3,262	1,406	256	1,353	0	222	0	0	0
Oman .....	12,808	0	488	0	0	0	0	0	0	0
Panama .....	0	0	223	0	0	0	0	0	0	0
Peru .....	10,162	0	0	0	0	0	0	1,917	0	0
Portugal .....	0	0	983	82	2,826	0	0	0	0	0
Puerto Rico .....	0	0	0	0	456	0	0	0	0	0
Romania .....	0	0	0	1,652	0	0	0	0	0	0
Russia .....	6,517	0	394	1,296	129	0	624	291	0	0
Singapore .....	0	0	1,913	0	445	155	0	0	0	0
Spain .....	311	0	4,536	1,631	3,022	0	0	319	0	0
Sweden .....	0	0	1,324	0	15	0	0	0	0	0
Thailand .....	566	0	0	0	0	0	0	0	0	0
Trinidad and Tobago .....	21,265	0	2,495	448	0	0	131	2,791	0	0
Tunisia .....	0	0	654	0	0	0	0	0	0	0
Turkey .....	0	0	344	0	651	0	0	0	0	0
United Kingdom .....	78,913	368	3,193	15,087	13,349	0	31	1,638	0	0
Virgin Islands .....	0	0	13,430	2,645	35,731	13,810	29,516	19,278	0	0
Yemen .....	0	0	200	0	0	0	0	582	0	0
Zaire .....	5,487	0	0	0	0	0	0	0	0	0
Other .....	19,718	0	495	6,992	1,526	0	622	1,167	0	0
<b>Total</b> .....	<b>2,747,839</b>	<b>60,730</b>	<b>134,401</b>	<b>60,935</b>	<b>123,099</b>	<b>40,561</b>	<b>84,234</b>	<b>90,854</b>	<b>452</b>	<b>3,457</b>
<b>Persian Gulf<sup>d</sup></b> .....	<b>544,426</b>	<b>1,988</b>	<b>19,974</b>	<b>93</b>	<b>7,571</b>	<b>101</b>	<b>0</b>	<b>2,257</b>	<b>0</b>	<b>0</b>

See footnotes at end of table.

**Table 21. Imports of Crude Oil and Petroleum Products into the United States by Country of Origin,<sup>a</sup> 1996 (Continued)**  
(Thousand Barrels)

Country of Origin	Naphtha for Petrochemical Feedstock Use	Other Oils for Petrochemical Feedstock Use	Lubricants	Asphalt and Road Oil	Other Products <sup>c</sup>	Total Products	Total Crude Oil and Products	Daily Average		
								Crude Oil	Products	Total
<b>Arab OPEC</b> .....	<b>3,189</b>	<b>41,947</b>	<b>0</b>	<b>0</b>	<b>22,121</b>	<b>132,876</b>	<b>680,266</b>	<b>1,496</b>	<b>363</b>	<b>1,859</b>
Algeria .....	1,454	41,947	0	0	13,762	90,798	93,762	8	248	256
Iraq .....	0	0	0	0	0	0	423	1	0	1
Kuwait .....	0	0	0	0	143	244	86,371	235	1	236
Saudi Arabia .....	1,735	0	0	0	8,216	41,834	498,730	1,248	114	1,363
United Arab Emirates .....	0	0	0	0	0	0	980	3	0	3
<b>Other OPEC</b> .....	<b>1,045</b>	<b>412</b>	<b>0</b>	<b>5,886</b>	<b>5,423</b>	<b>150,220</b>	<b>861,037</b>	<b>1,942</b>	<b>410</b>	<b>2,353</b>
Indonesia .....	0	0	0	0	14	5,515	21,670	44	15	59
Nigeria .....	0	230	0	0	0	8,046	225,957	595	22	617
Venezuela .....	1,045	182	0	5,886	5,409	136,659	613,410	1,303	373	1,676
<b>Non OPEC</b> .....	<b>15,997</b>	<b>9,671</b>	<b>4,185</b>	<b>3,947</b>	<b>8,743</b>	<b>438,193</b>	<b>1,927,825</b>	<b>4,070</b>	<b>1,197</b>	<b>5,267</b>
Angola .....	0	0	0	0	0	2,784	128,629	344	8	351
Argentina .....	437	342	0	0	129	4,440	20,751	45	12	57
Australia .....	0	2,524	0	0	0	2,524	11,500	25	7	31
Bahama Islands .....	0	0	0	0	0	408	408	0	1	1
Belgium .....	335	0	0	0	0	7,654	7,654	0	21	21
Benin .....	0	0	0	0	0	0	634	2	0	2
Brazil .....	34	0	0	0	27	3,393	3,393	0	9	9
Cameroon .....	0	0	0	0	0	921	1,669	2	3	5
Canada .....	969	0	752	2,761	4,531	127,530	521,101	1,075	348	1,424
China, People's Republic of .....	0	0	0	0	0	0	21,030	57	0	57
Colombia .....	183	0	0	0	0	2,861	85,657	226	8	234
Congo .....	0	0	0	0	0	0	11,963	33	0	33
Ecuador .....	82	101	0	0	0	2,757	37,960	96	8	104
Egypt .....	742	0	0	0	0	2,071	15,923	38	6	44
France .....	165	0	0	0	869	6,290	6,290	0	17	17
Gabon .....	0	0	0	0	0	0	67,475	184	0	184
Germany, FR .....	0	0	0	0	72	5,182	5,182	0	14	14
Greece .....	1,354	0	0	0	290	2,256	2,256	0	6	6
Guatemala .....	0	0	0	0	0	0	4,562	12	0	12
India .....	594	222	0	0	250	1,592	1,592	0	4	4
Italy .....	21	0	101	0	0	2,977	2,977	0	8	8
Ivory Coast .....	0	0	0	0	0	1,593	1,593	0	4	4
Japan .....	121	0	0	0	29	150	150	0	(s)	(s)
Korea, Republic of .....	148	0	0	0	168	3,708	3,708	0	10	10
Malaysia .....	0	312	0	0	120	2,134	4,198	6	6	11
Mexico .....	3,196	1,183	0	660	970	13,774	455,406	1,207	38	1,244
Netherlands .....	1,087	60	0	0	653	7,100	7,100	0	19	19
Netherlands Antilles .....	1,175	2,552	0	0	0	23,478	23,478	0	64	64
New Zealand .....	0	1,239	0	0	185	1,424	1,424	0	4	4
Norway .....	21	780	0	0	0	7,300	114,523	293	20	313
Oman .....	0	0	0	0	0	488	13,296	35	1	36
Panama .....	0	0	0	0	0	223	223	0	1	1
Peru .....	177	0	0	0	0	2,094	12,256	28	6	33
Portugal .....	102	0	0	0	0	3,993	3,993	0	11	11
Puerto Rico .....	3,657	0	3,332	0	0	7,445	7,445	0	20	20
Romania .....	0	0	0	0	0	1,652	1,652	0	5	5
Russia .....	0	0	0	0	0	2,734	9,251	18	7	25
Singapore .....	0	40	0	0	0	2,553	2,553	0	7	7
Spain .....	53	0	0	526	43	10,130	10,441	1	28	29
Sweden .....	0	0	0	0	0	1,339	1,339	0	4	4
Thailand .....	0	0	0	0	0	0	566	2	0	2
Trinidad and Tobago .....	505	0	0	0	37	6,407	27,672	58	18	76
Tunisia .....	0	0	0	0	0	654	654	0	2	2
Turkey .....	44	0	0	0	0	1,039	1,039	0	3	3
United Kingdom .....	117	0	0	0	0	33,783	112,696	216	92	308
Virgin Islands .....	179	0	0	0	0	114,589	114,589	0	313	313
Yemen .....	0	0	0	0	0	782	782	0	2	2
Zaire .....	0	0	0	0	0	0	5,487	15	0	15
Other .....	499	316	0	0	370	11,987	31,705	54	33	87
<b>Total</b> .....	<b>20,231</b>	<b>52,030</b>	<b>4,185</b>	<b>9,833</b>	<b>36,287</b>	<b>721,289</b>	<b>3,469,128</b>	<b>7,508</b>	<b>1,971</b>	<b>9,478</b>
<b>Persian Gulf<sup>d</sup></b> .....	<b>2,234</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>8,359</b>	<b>42,577</b>	<b>587,003</b>	<b>1,488</b>	<b>116</b>	<b>1,604</b>

<sup>a</sup> Crude oil and unfinished oils are reported by the PAD District in which they are to be processed; all other products are reported by the PAD District of entry.

<sup>b</sup> Includes crude oil imported for storage in the Strategic Petroleum Reserve.

<sup>c</sup> Includes aviation gasoline, aviation gasoline blending components, miscellaneous products, other hydrocarbons and oxygenates, pentanes plus, petroleum coke, and waxes.

<sup>d</sup> Includes Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and United Arab Emirates.

(s) = Less than 500 barrels per day.

Note: Totals may not equal sum of components due to independent rounding.

Source: Energy Information Administration (EIA) Form EIA-814, "Monthly Imports Report."



**Table 22. PAD District I—Imports of Crude Oil and Petroleum Products by Country of Origin,<sup>a</sup> 1996**  
(Thousand Barrels)

Country of Origin	Crude Oil <sup>b</sup>	Liquefied Petroleum Gases	Unfinished Oils	Gasoline Blending Components	Finished Motor Gasoline	Jet Fuel	Distillate Fuel Oil	Residual Fuel Oil	Kerosene	Special Naphthas
<b>Arab OPEC</b> .....	<b>62,883</b>	<b>3,191</b>	<b>335</b>	<b>1,318</b>	<b>7,571</b>	<b>129</b>	<b>433</b>	<b>8,990</b>	<b>0</b>	<b>0</b>
Algeria .....	0	3,191	335	1,225	0	28	433	8,990	0	0
Kuwait .....	549	0	0	0	0	101	0	0	0	0
Saudi Arabia .....	62,334	0	0	93	7,571	0	0	0	0	0
<b>Other OPEC</b> .....	<b>142,848</b>	<b>1,122</b>	<b>2,798</b>	<b>12,137</b>	<b>17,040</b>	<b>16,237</b>	<b>19,079</b>	<b>28,707</b>	<b>0</b>	<b>0</b>
Indonesia .....	2,054	0	615	0	0	0	0	2,674	0	0
Nigeria .....	70,647	0	1,149	163	0	0	0	3,633	0	0
Venezuela .....	70,147	1,122	1,034	11,974	17,040	16,237	19,079	22,400	0	0
<b>Non OPEC</b> .....	<b>259,389</b>	<b>6,596</b>	<b>18,843</b>	<b>44,696</b>	<b>92,074</b>	<b>20,226</b>	<b>57,747</b>	<b>44,346</b>	<b>431</b>	<b>1,932</b>
Angola .....	74,836	0	0	60	0	0	330	1,252	0	0
Argentina .....	431	0	0	1,343	86	0	30	622	0	0
Bahama Islands .....	0	0	0	0	0	0	0	408	0	0
Belgium .....	0	0	0	2,134	979	0	0	330	0	0
Brazil .....	0	0	0	1,549	1,212	0	0	220	0	0
Cameroon .....	0	0	0	0	0	0	0	261	0	0
Canada .....	22,717	3,795	147	2,250	29,919	942	26,867	7,399	431	1,932
China, People's Republic of .....	10,588	0	0	0	0	0	0	0	0	0
Colombia .....	10,740	0	0	0	97	328	0	1,890	0	0
Congo .....	2,042	0	0	0	0	0	0	0	0	0
Ecuador .....	5,563	0	0	0	0	0	0	1,065	0	0
Egypt .....	11,689	0	0	266	0	0	0	0	0	0
France .....	0	0	218	3,521	754	0	0	0	0	0
Gabon .....	32,449	0	0	0	0	0	0	0	0	0
Germany, FR .....	0	0	3,045	260	318	0	459	877	0	0
Greece .....	0	0	0	0	0	0	0	0	0	0
India .....	0	0	271	0	0	0	0	0	0	0
Italy .....	0	0	0	1,170	865	0	0	476	0	0
Ivory Coast .....	0	0	282	0	0	0	0	756	0	0
Japan .....	0	0	0	0	0	0	0	0	0	0
Mexico .....	5,866	0	119	1,791	0	0	0	0	0	0
Netherlands .....	0	0	0	2,365	2,234	0	0	0	0	0
Netherlands Antilles .....	0	0	776	311	568	5,739	375	2,350	0	0
Norway .....	55,476	2,583	0	256	1,353	0	222	0	0	0
Peru .....	712	0	0	0	0	0	0	1,235	0	0
Portugal .....	0	0	0	82	1,011	0	0	0	0	0
Puerto Rico .....	0	0	0	0	456	0	0	0	0	0
Romania .....	0	0	0	1,652	0	0	0	0	0	0
Russia .....	0	0	0	1,296	129	0	624	291	0	0
Spain .....	0	0	727	1,631	3,022	0	0	319	0	0
Sweden .....	0	0	0	0	15	0	0	0	0	0
Trinidad and Tobago .....	534	0	607	448	0	0	131	2,791	0	0
Turkey .....	0	0	240	0	0	0	0	0	0	0
United Kingdom .....	23,266	218	447	15,087	13,349	0	31	1,225	0	0
Virgin Islands .....	0	0	11,964	2,645	34,339	13,217	28,237	19,278	0	0
Yemen .....	0	0	0	0	0	0	0	303	0	0
Zaire .....	2,480	0	0	0	0	0	0	0	0	0
Other .....	0	0	0	4,579	1,368	0	441	998	0	0
<b>Total</b> .....	<b>465,120</b>	<b>10,909</b>	<b>21,976</b>	<b>58,151</b>	<b>116,685</b>	<b>36,592</b>	<b>77,259</b>	<b>82,043</b>	<b>431</b>	<b>1,932</b>
<b>Persian Gulf<sup>d</sup></b> .....	<b>62,883</b>	<b>0</b>	<b>0</b>	<b>93</b>	<b>7,571</b>	<b>101</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

See footnotes at end of table.

**Table 22. PAD District I—Imports of Crude Oil and Petroleum Products by Country of Origin,<sup>a</sup> 1996 (Continued)**  
(Thousand Barrels)

Country of Origin	Naphtha for Petrochemical Feedstock Use	Other Oils for Petrochemical Feedstock Use	Lubricants	Asphalt and Road Oil	Other Products <sup>c</sup>	Total Products	Total Crude Oil and Products	Daily Average		
								Crude Oil	Products	Total
<b>Arab OPEC</b> .....	175	0	0	0	1,670	23,812	86,695	172	65	237
Algeria .....	175	0	0	0	0	14,377	14,377	0	39	39
Kuwait .....	0	0	0	0	0	101	650	2	(s)	2
Saudi Arabia .....	0	0	0	0	1,670	9,334	71,668	170	26	196
<b>Other OPEC</b> .....	0	0	0	5,541	1,287	103,948	246,796	390	284	674
Indonesia .....	0	0	0	0	0	3,289	5,343	6	9	15
Nigeria .....	0	0	0	0	0	4,945	75,592	193	14	207
Venezuela .....	0	0	0	5,541	1,287	95,714	165,861	192	262	453
<b>Non OPEC</b> .....	3,252	0	3,821	3,413	1,373	298,750	558,139	709	816	1,525
Angola .....	0	0	0	0	0	1,642	76,478	204	4	209
Argentina .....	0	0	0	0	129	2,210	2,641	1	6	7
Bahama Islands .....	0	0	0	0	0	408	408	0	1	1
Belgium .....	0	0	0	0	0	3,443	3,443	0	9	9
Brazil .....	0	0	0	0	0	2,981	2,981	0	8	8
Cameroon .....	0	0	0	0	0	261	261	0	1	1
Canada .....	86	0	489	2,227	154	76,638	99,355	62	209	271
China, People's Republic of .....	0	0	0	0	0	0	10,588	29	0	29
Colombia .....	0	0	0	0	0	2,315	13,055	29	6	36
Congo .....	0	0	0	0	0	0	2,042	6	0	6
Ecuador .....	0	0	0	0	0	1,065	6,628	15	3	18
Egypt .....	0	0	0	0	0	266	11,955	32	1	33
France .....	35	0	0	0	258	4,786	4,786	0	13	13
Gabon .....	0	0	0	0	0	0	32,449	89	0	89
Germany, FR .....	0	0	0	0	72	5,031	5,031	0	14	14
Greece .....	0	0	0	0	143	143	143	0	(s)	(s)
India .....	0	0	0	0	0	271	271	0	1	1
Italy .....	0	0	0	0	0	2,511	2,511	0	7	7
Ivory Coast .....	0	0	0	0	0	1,038	1,038	0	3	3
Japan .....	0	0	0	0	14	14	14	0	(s)	(s)
Mexico .....	0	0	0	660	0	2,570	8,436	16	7	23
Netherlands .....	83	0	0	0	424	5,106	5,106	0	14	14
Netherlands Antilles .....	0	0	0	0	0	10,119	10,119	0	28	28
Norway .....	0	0	0	0	0	4,414	59,890	152	12	164
Peru .....	177	0	0	0	0	1,412	2,124	2	4	6
Portugal .....	6	0	0	0	0	1,099	1,099	0	3	3
Puerto Rico .....	2,764	0	3,332	0	0	6,552	6,552	0	18	18
Romania .....	0	0	0	0	0	1,652	1,652	0	5	5
Russia .....	0	0	0	0	0	2,340	2,340	0	6	6
Spain .....	0	0	0	526	43	6,268	6,268	0	17	17
Sweden .....	0	0	0	0	0	15	15	0	(s)	(s)
Trinidad and Tobago .....	0	0	0	0	37	4,014	4,548	1	11	12
Turkey .....	0	0	0	0	0	240	240	0	1	1
United Kingdom .....	101	0	0	0	0	30,458	53,724	64	83	147
Virgin Islands .....	0	0	0	0	0	109,680	109,680	0	300	300
Yemen .....	0	0	0	0	0	303	303	0	1	1
Zaire .....	0	0	0	0	0	0	2,480	7	0	7
Other .....	0	0	0	0	99	7,485	7,485	0	20	20
<b>Total</b> .....	3,427	0	3,821	8,954	4,330	426,510	891,630	1,271	1,165	2,436
<b>Persian Gulf<sup>d</sup></b> .....	0	0	0	0	1,670	9,435	72,318	172	26	198

<sup>a</sup> Crude oil and unfinished oils are reported by the PAD District in which they are to be processed; all other products are reported by the PAD District of entry.  
<sup>b</sup> Includes crude oil imported for storage in the Strategic Petroleum Reserve.  
<sup>c</sup> Includes aviation gasoline, aviation gasoline blending components, miscellaneous products, other hydrocarbons and oxygenates, pentanes plus, petroleum coke, and waxes.  
<sup>d</sup> Includes Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and United Arab Emirates.  
(s) = Less than 500 barrels per day.  
Note: Totals may not equal sum of components due to independent rounding.  
Source: Energy Information Administration (EIA) Form EIA-814, "Monthly imports Report."



**Table 23. PAD District II—Imports of Crude Oil and Petroleum Products by Country of Origin,<sup>a</sup> 1996**  
(Thousand Barrels)

Country of Origin	Crude Oil <sup>b</sup>	Liquefied Petroleum Gases	Unfinished Oils	Gasoline Blending Components	Finished Motor Gasoline	Jet Fuel	Distillate Fuel Oil	Residual Fuel Oil	Kerosene	Special Naphthas
<b>Arab OPEC .....</b>	<b>42,571</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Kuwait .....	17,220	0	0	0	0	0	0	0	0	0
Saudi Arabia .....	25,351	0	0	0	0	0	0	0	0	0
<b>Other OPEC .....</b>	<b>101,517</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Nigeria .....	31,338	0	0	0	0	0	0	0	0	0
Venezuela .....	70,179	0	0	0	0	0	0	0	0	0
<b>Non OPEC .....</b>	<b>370,534</b>	<b>23,223</b>	<b>230</b>	<b>188</b>	<b>1,153</b>	<b>0</b>	<b>2,180</b>	<b>109</b>	<b>0</b>	<b>212</b>
Angola .....	13,550	0	0	0	0	0	0	0	0	0
Canada .....	281,805	23,223	230	188	1,153	0	2,180	109	0	212
Colombia .....	10,277	0	0	0	0	0	0	0	0	0
Ecuador .....	5,979	0	0	0	0	0	0	0	0	0
Gabon .....	1,172	0	0	0	0	0	0	0	0	0
Malaysia .....	710	0	0	0	0	0	0	0	0	0
Mexico .....	42,164	0	0	0	0	0	0	0	0	0
Norway .....	4,216	0	0	0	0	0	0	0	0	0
Trinidad and Tobago .....	3,308	0	0	0	0	0	0	0	0	0
United Kingdom .....	5,200	0	0	0	0	0	0	0	0	0
Zaire .....	662	0	0	0	0	0	0	0	0	0
Other .....	1,491	0	0	0	0	0	0	0	0	0
<b>Total .....</b>	<b>514,622</b>	<b>23,223</b>	<b>230</b>	<b>188</b>	<b>1,153</b>	<b>0</b>	<b>2,180</b>	<b>109</b>	<b>0</b>	<b>212</b>
<b>Persian Gulf<sup>d</sup> .....</b>	<b>42,571</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

See footnotes at end of table.

**Table 23. PAD District II—Imports of Crude Oil and Petroleum Products by Country of Origin,<sup>a</sup> 1996 (Continued)**  
(Thousand Barrels)

Country of Origin	Naphtha for Petrochemical Feedstock Use	Other Oils for Petrochemical Feedstock Use	Lubricants	Asphalt and Road Oil	Other Products <sup>c</sup>	Total Products	Total Crude Oil and Products	Daily Average		
								Crude Oil	Products	Total
<b>Arab OPEC</b> .....	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>42,571</b>	<b>116</b>	<b>0</b>	<b>116</b>
Kuwait .....	0	0	0	0	0	0	17,220	47	0	47
Saudi Arabia .....	0	0	0	0	0	0	25,351	69	0	69
<b>Other OPEC</b> .....	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>101,517</b>	<b>277</b>	<b>0</b>	<b>277</b>
Nigeria .....	0	0	0	0	0	0	31,338	86	0	86
Venezuela .....	0	0	0	0	0	0	70,179	192	0	192
<b>Non OPEC</b> .....	<b>399</b>	<b>0</b>	<b>263</b>	<b>416</b>	<b>455</b>	<b>28,828</b>	<b>399,362</b>	<b>1,012</b>	<b>79</b>	<b>1,091</b>
Angola .....	0	0	0	0	0	0	13,550	37	0	37
Canada .....	399	0	263	416	455	28,828	310,633	770	79	849
Colombia .....	0	0	0	0	0	0	10,277	28	0	28
Ecuador .....	0	0	0	0	0	0	5,979	16	0	16
Gabon .....	0	0	0	0	0	0	1,172	3	0	3
Malaysia .....	0	0	0	0	0	0	710	2	0	2
Mexico .....	0	0	0	0	0	0	42,164	115	0	115
Norway .....	0	0	0	0	0	0	4,216	12	0	12
Trinidad and Tobago .....	0	0	0	0	0	0	3,308	9	0	9
United Kingdom .....	0	0	0	0	0	0	5,200	14	0	14
Zaire .....	0	0	0	0	0	0	662	2	0	2
Other .....	0	0	0	0	0	0	1,491	4	0	4
<b>Total</b> .....	<b>399</b>	<b>0</b>	<b>263</b>	<b>416</b>	<b>455</b>	<b>28,828</b>	<b>543,450</b>	<b>1,406</b>	<b>79</b>	<b>1,485</b>
<b>Persian Gulf<sup>d</sup></b> .....	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>42,571</b>	<b>116</b>	<b>0</b>	<b>116</b>

<sup>a</sup> Crude oil and unfinished oils are reported by the PAD District in which they are to be processed; all other products are reported by the PAD District of entry.

<sup>b</sup> Includes crude oil imported for storage in the Strategic Petroleum Reserve.

<sup>c</sup> Includes aviation gasoline, aviation gasoline blending components, miscellaneous products, other hydrocarbons and oxygenates, pentanes plus, petroleum coke, and waxes.

<sup>d</sup> Includes Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and United Arab Emirates.

(s) = Less than 500 barrels per day.

Note: Totals may not equal sum of components due to independent rounding.

Source: Energy Information Administration (EIA) Form EIA-814, "Monthly Imports Report."



**Table 24. PAD District III—Imports of Crude Oil and Petroleum Products by Country of Origin,<sup>a</sup> 1996**  
(Thousand Barrels)

Country of Origin	Crude Oil <sup>b</sup>	Liquefied Petroleum Gases	Unfinished Oils	Gasoline Blending Components	Finished Motor Gasoline	Jet Fuel	Distillate Fuel Oil	Residual Fuel Oil	Kerosene	Special Naphthas
<b>Arab OPEC</b> .....	<b>425,406</b>	<b>10,028</b>	<b>31,237</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,040</b>	<b>0</b>	<b>0</b>
Algeria .....	2,964	8,040	11,263	0	0	0	0	0	0	0
Iraq .....	423	0	0	0	0	0	0	0	0	0
Kuwait .....	54,174	0	0	0	0	0	0	0	0	0
Saudi Arabia .....	367,391	1,988	19,974	0	0	0	0	2,040	0	0
United Arab Emirates .....	454	0	0	0	0	0	0	0	0	0
<b>Other OPEC</b> .....	<b>447,942</b>	<b>2,388</b>	<b>30,319</b>	<b>80</b>	<b>0</b>	<b>906</b>	<b>0</b>	<b>2,054</b>	<b>0</b>	<b>0</b>
Indonesia .....	1,030	0	559	0	0	0	0	0	0	0
Nigeria .....	115,926	0	1,535	0	0	0	0	1,336	0	0
Venezuela .....	330,986	2,388	28,225	80	0	906	0	718	0	0
<b>Non OPEC</b> .....	<b>712,727</b>	<b>10,260</b>	<b>42,191</b>	<b>0</b>	<b>1,991</b>	<b>256</b>	<b>41</b>	<b>3,222</b>	<b>0</b>	<b>1,271</b>
Angola .....	37,459	0	749	0	0	0	0	393	0	0
Argentina .....	15,880	0	1,364	0	0	0	0	87	0	0
Australia .....	0	0	0	0	0	0	0	0	0	0
Belgium .....	0	0	3,876	0	0	0	0	0	0	0
Brazil .....	0	0	0	0	0	0	0	0	0	121
Cameroon .....	748	0	252	0	0	0	0	408	0	0
Canada .....	3,151	6,655	1,583	0	0	30	0	0	0	984
China, People's Republic of .....	489	0	0	0	0	0	0	0	0	0
Colombia .....	60,640	0	198	0	0	0	0	165	0	0
Congo .....	9,921	0	0	0	0	0	0	0	0	0
Ecuador .....	17,454	0	953	0	0	0	0	361	0	0
Egypt .....	2,163	0	798	0	0	0	0	265	0	0
France .....	0	0	763	0	0	0	0	0	0	0
Gabon .....	33,854	0	0	0	0	0	0	0	0	0
Germany, FR .....	0	0	151	0	0	0	0	0	0	0
Greece .....	0	0	612	0	0	0	0	0	0	0
Guatemala .....	4,562	0	0	0	0	0	0	0	0	0
India .....	0	0	255	0	0	0	0	0	0	0
Italy .....	0	0	313	0	0	0	0	0	0	31
Ivory Coast .....	0	0	317	0	0	0	0	0	0	0
Japan .....	0	0	0	0	0	0	0	0	0	0
Korea, Republic of .....	0	0	3,188	0	0	0	0	0	0	0
Malaysia .....	524	0	415	0	0	0	0	0	0	0
Mexico .....	393,602	2,776	1,777	0	0	226	41	0	0	85
Netherlands .....	0	0	338	0	0	0	0	0	0	0
Netherlands Antilles .....	0	0	8,472	0	0	0	0	0	0	50
New Zealand .....	0	0	0	0	0	0	0	0	0	0
Norway .....	47,531	679	1,406	0	0	0	0	0	0	0
Oman .....	499	0	488	0	0	0	0	0	0	0
Panama .....	0	0	223	0	0	0	0	0	0	0
Peru .....	4,371	0	0	0	0	0	0	682	0	0
Portugal .....	0	0	983	0	1,340	0	0	0	0	0
Puerto Rico .....	0	0	0	0	0	0	0	0	0	0
Russia .....	6,417	0	394	0	0	0	0	0	0	0
Spain .....	311	0	3,809	0	0	0	0	0	0	0
Sweden .....	0	0	1,324	0	0	0	0	0	0	0
Thailand .....	566	0	0	0	0	0	0	0	0	0
Trinidad and Tobago .....	17,423	0	1,888	0	0	0	0	0	0	0
Tunisia .....	0	0	654	0	0	0	0	0	0	0
Turkey .....	0	0	104	0	651	0	0	0	0	0
United Kingdom .....	50,447	150	2,746	0	0	0	0	413	0	0
Virgin Islands .....	0	0	1,103	0	0	0	0	0	0	0
Yemen .....	0	0	200	0	0	0	0	279	0	0
Zaire .....	2,345	0	0	0	0	0	0	0	0	0
Other .....	1,736	0	495	0	0	0	0	169	0	0
<b>Total</b> .....	<b>1,586,075</b>	<b>22,676</b>	<b>103,747</b>	<b>80</b>	<b>1,991</b>	<b>1,162</b>	<b>41</b>	<b>7,316</b>	<b>0</b>	<b>1,271</b>
<b>Persian Gulf<sup>d</sup></b> .....	<b>422,442</b>	<b>1,988</b>	<b>19,974</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,040</b>	<b>0</b>	<b>0</b>

See footnotes at end of table.

**Table 24. PAD District III—Imports of Crude Oil and Petroleum Products by Country of Origin,<sup>a</sup> 1996 (Continued)**  
(Thousand Barrels)

Country of Origin	Naphtha for Petrochemical Feedstock Use	Other Oils for Petrochemical Feedstock Use	Lubricants	Asphalt and Road Oil	Other Products <sup>c</sup>	Total Products	Total Crude Oil and Products	Daily Average		
								Crude Oil	Products	Total
<b>Arab OPEC</b> .....	<b>3,014</b>	<b>41,947</b>	<b>0</b>	<b>0</b>	<b>13,905</b>	<b>102,171</b>	<b>527,577</b>	<b>1,162</b>	<b>279</b>	<b>1,441</b>
Algeria .....	1,279	41,947	0	0	13,762	76,291	79,255	8	208	217
Iraq .....	0	0	0	0	0	0	423	1	0	1
Kuwait .....	0	0	0	0	143	143	54,317	148	(s)	148
Saudi Arabia .....	1,735	0	0	0	0	25,737	393,128	1,004	70	1,074
United Arab Emirates .....	0	0	0	0	0	0	454	1	0	1
<b>Other OPEC</b> .....	<b>1,045</b>	<b>412</b>	<b>0</b>	<b>345</b>	<b>279</b>	<b>37,828</b>	<b>485,770</b>	<b>1,224</b>	<b>103</b>	<b>1,327</b>
Indonesia .....	0	0	0	0	14	573	1,603	3	2	4
Nigeria .....	0	230	0	0	0	3,101	119,027	317	8	325
Venezuela .....	1,045	182	0	345	265	34,154	365,140	904	93	998
<b>Non OPEC</b> .....	<b>12,198</b>	<b>9,631</b>	<b>101</b>	<b>0</b>	<b>2,265</b>	<b>83,427</b>	<b>796,154</b>	<b>1,947</b>	<b>228</b>	<b>2,175</b>
Angola .....	0	0	0	0	0	1,142	38,601	102	3	105
Argentina .....	437	342	0	0	0	2,230	18,110	43	6	49
Australia .....	0	2,524	0	0	0	2,524	2,524	0	7	7
Belgium .....	335	0	0	0	0	4,211	4,211	0	12	12
Brazil .....	34	0	0	0	27	182	182	0	(s)	(s)
Cameroon .....	0	0	0	0	0	660	1,408	2	2	4
Canada .....	484	0	0	0	0	9,736	12,887	9	27	35
China, People's Republic of .....	0	0	0	0	0	0	489	1	0	1
Colombia .....	183	0	0	0	0	546	61,186	166	1	167
Congo .....	0	0	0	0	0	0	9,921	27	0	27
Ecuador .....	82	101	0	0	0	1,497	18,951	48	4	52
Egypt .....	742	0	0	0	0	1,805	3,968	6	5	11
France .....	130	0	0	0	611	1,504	1,504	0	4	4
Gabon .....	0	0	0	0	0	0	33,854	92	0	92
Germany, FR .....	0	0	0	0	0	151	151	0	(s)	(s)
Greece .....	1,354	0	0	0	147	2,113	2,113	0	6	6
Guatemala .....	0	0	0	0	0	0	4,562	12	0	12
India .....	594	222	0	0	250	1,321	1,321	0	4	4
Italy .....	21	0	101	0	0	466	466	0	1	1
Ivory Coast .....	0	0	0	0	0	317	317	0	1	1
Japan .....	121	0	0	0	15	136	136	0	(s)	(s)
Korea, Republic of .....	0	0	0	0	0	3,188	3,188	0	9	9
Malaysia .....	0	312	0	0	0	727	1,251	1	2	3
Mexico .....	3,196	1,183	0	0	950	10,234	403,836	1,075	28	1,103
Netherlands .....	1,004	60	0	0	0	1,402	1,402	0	4	4
Netherlands Antilles .....	1,175	2,552	0	0	0	12,249	12,249	0	33	33
New Zealand .....	0	1,239	0	0	185	1,424	1,424	0	4	4
Norway .....	21	780	0	0	0	2,886	50,417	130	8	138
Oman .....	0	0	0	0	0	488	987	1	1	3
Panama .....	0	0	0	0	0	223	223	0	1	1
Peru .....	0	0	0	0	0	682	5,053	12	2	14
Portugal .....	96	0	0	0	0	2,419	2,419	0	7	7
Puerto Rico .....	893	0	0	0	0	893	893	0	2	2
Russia .....	0	0	0	0	0	394	6,811	18	1	19
Spain .....	53	0	0	0	0	3,862	4,173	1	11	11
Sweden .....	0	0	0	0	0	1,324	1,324	0	4	4
Thailand .....	0	0	0	0	0	0	566	2	0	2
Trinidad and Tobago .....	505	0	0	0	0	2,393	19,816	48	7	54
Tunisia .....	0	0	0	0	0	654	654	0	2	2
Turkey .....	44	0	0	0	0	799	799	0	2	2
United Kingdom .....	16	0	0	0	0	3,325	53,772	138	9	147
Virgin Islands .....	179	0	0	0	0	1,282	1,282	0	4	4
Yemen .....	0	0	0	0	0	479	479	0	1	1
Zaire .....	0	0	0	0	0	0	2,345	6	0	6
Other .....	499	316	0	0	80	1,559	3,295	5	4	9
<b>Total</b> .....	<b>16,257</b>	<b>51,990</b>	<b>101</b>	<b>345</b>	<b>16,449</b>	<b>223,426</b>	<b>1,809,501</b>	<b>4,334</b>	<b>610</b>	<b>4,944</b>
<b>Persian Gulf<sup>d</sup></b> .....	<b>2,234</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>143</b>	<b>26,379</b>	<b>448,821</b>	<b>1,154</b>	<b>72</b>	<b>1,226</b>

<sup>a</sup> Crude oil and unfinished oils are reported by the PAD District in which they are to be processed; all other products are reported by the PAD District of entry.  
<sup>b</sup> Includes crude oil imported for storage in the Strategic Petroleum Reserve.  
<sup>c</sup> Includes aviation gasoline, aviation gasoline blending components, miscellaneous products, other hydrocarbons and oxygenates, pentanes plus, petroleum coke, and waxes.  
<sup>d</sup> Includes Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and United Arab Emirates.  
(s) = Less than 500 barrels per day.  
Note: Totals may not equal sum of components due to independent rounding.  
Source: Energy Information Administration (EIA) Form EIA-814, "Monthly Imports Report."



**Table 25. PAD Districts IV and V—Imports of Crude Oil and Petroleum Products by Country of Origin,<sup>a</sup> 1996**  
(Thousand Barrels)

Country of Origin	Crude Oil <sup>b</sup>	Liquefied Petroleum Gases	Unfinished Oils	Gasoline Blending Components	Finished Motor Gasoline	Jet Fuel	Distillate Fuel Oil	Residual Fuel Oil	Kerosene	Special Naphthas
PAD District IV										
Non OPEC .....	45,571	3,397	0	0	398	0	2,687	0	0	0
Canada .....	45,571	3,397	0	0	398	0	2,687	0	0	0
Total .....	45,571	3,397	0	0	398	0	2,687	0	0	0
PAD District V										
Arab OPEC .....	16,530	0	0	0	0	130	0	217	0	0
Algeria .....	0	0	0	0	0	130	0	0	0	0
Kuwait .....	14,184	0	0	0	0	0	0	0	0	0
Saudi Arabia .....	1,820	0	0	0	0	0	0	217	0	0
United Arab Emirates .....	526	0	0	0	0	0	0	0	0	0
Other OPEC .....	18,510	0	2,560	0	218	831	0	978	0	0
Indonesia .....	13,071	0	872	0	0	103	0	678	0	0
Venezuela .....	5,439	0	1,688	0	218	728	0	300	0	0
Non OPEC .....	101,411	525	5,888	2,516	2,654	1,846	2,067	191	21	42
Australia .....	8,976	0	0	0	0	0	0	0	0	0
Brazil .....	0	0	230	0	0	0	0	0	0	0
Canada .....	40,327	525	212	0	184	24	607	191	21	42
China, People's Republic of ....	9,953	0	0	0	0	0	0	0	0	0
Colombia .....	1,139	0	0	0	0	0	0	0	0	0
Ecuador .....	6,207	0	195	0	0	0	0	0	0	0
Ivory Coast .....	0	0	238	0	0	0	0	0	0	0
Korea, Republic of .....	0	0	0	103	0	101	0	0	0	0
Malaysia .....	830	0	1,287	0	0	0	0	0	0	0
Mexico .....	0	0	0	0	0	950	0	0	0	0
Netherlands .....	0	0	363	0	0	0	0	0	0	0
Netherlands Antilles .....	0	0	1,087	0	0	23	0	0	0	0
Oman .....	12,309	0	0	0	0	0	0	0	0	0
Peru .....	5,079	0	0	0	0	0	0	0	0	0
Portugal .....	0	0	0	0	475	0	0	0	0	0
Russia .....	100	0	0	0	0	0	0	0	0	0
Singapore .....	0	0	1,913	0	445	155	0	0	0	0
Virgin Islands .....	0	0	363	0	1,392	593	1,279	0	0	0
Other .....	16,491	0	0	2,413	158	0	181	0	0	0
Total .....	136,451	525	8,448	2,516	2,872	2,807	2,067	1,386	21	42
Persian Gulf <sup>d</sup> .....	16,530	0	0	0	0	0	0	217	0	0

See footnotes at end of table.

**Table 25. PAD Districts IV and V—Imports of Crude Oil and Petroleum Products by Country of Origin,<sup>a</sup> 1996 (Continued)**  
(Thousand Barrels)

(Thousand Barrels)										
Country of Origin	Naphtha for Petrochemical Feedstock Use	Other Oils for Petrochemical Feedstock Use					Total Crude Oil and Products	Daily Average		
								Crude Oil	Products	Total
PAD District IV										
Non OPEC .....	0	0	0	79	825	7,386	52,957	125	20	145
Canada .....	0	0	0	79	825	7,386	52,957	125	20	145
Total .....	0	0	0	79	825	7,386	52,957	125	20	145
PAD District V										
Arab OPEC .....	0	0	0	0	6,546	6,893	23,423	45	19	64
Algeria .....	0	0	0	0	0	130	130	0	(s)	(s)
Kuwait .....	0	0	0	0	0	0	14,184	39	0	39
Saudi Arabia .....	0	0	0	0	6,546	6,763	8,583	5	18	23
United Arab Emirates .....	0	0	0	0	0	0	526	1	0	1
Other OPEC .....	0	0	0	0	3,857	8,444	26,954	51	23	74
Indonesia .....	0	0	0	0	0	1,653	14,724	36	5	40
Venezuela .....	0	0	0	0	3,857	6,791	12,230	15	19	33
Non OPEC .....	148	40	0	39	3,825	19,802	121,213	277	54	331
Australia .....	0	0	0	0	0	0	8,976	25	0	25
Brazil .....	0	0	0	0	0	230	230	0	1	1
Canada .....	0	0	0	39	3,097	4,942	45,269	110	14	124
China, People's Republic of .....	0	0	0	0	0	0	9,953	27	0	27
Colombia .....	0	0	0	0	0	0	1,139	3	0	3
Ecuador .....	0	0	0	0	0	195	6,402	17	1	17
Ivory Coast .....	0	0	0	0	0	238	238	0	1	1
Korea, Republic of .....	148	0	0	0	168	520	520	0	1	1
Malaysia .....	0	0	0	0	120	1,407	2,237	2	4	6
Mexico .....	0	0	0	0	20	970	970	0	3	3
Netherlands .....	0	0	0	0	229	592	592	0	2	2
Netherlands Antilles .....	0	0	0	0	0	1,110	1,110	0	3	3
Oman .....	0	0	0	0	0	0	12,309	34	0	34
Peru .....	0	0	0	0	0	0	5,079	14	0	14
Portugal .....	0	0	0	0	0	475	475	0	1	1
Russia .....	0	0	0	0	0	0	100	(s)	0	(s)
Singapore .....	0	40	0	0	0	2,553	2,553	0	7	7
Virgin Islands .....	0	0	0	0	0	3,627	3,627	0	10	10
Other .....	0	0	0	0	191	2,943	19,434	45	8	53
Total .....	148	40	0	39	14,228	35,139	171,590	373	96	469
Persian Gulf <sup>d</sup> .....	0	0	0	0	6,546	6,763	23,293	45	18	64

<sup>a</sup> Crude oil and unfinished oils are reported by the PAD District in which they are to be processed; all other products are reported by the PAD District of entry.

<sup>b</sup> Includes crude oil imported for storage in the Strategic Petroleum Reserve.

<sup>c</sup> Includes aviation gasoline, aviation gasoline blending components, miscellaneous products, other hydrocarbons and oxygenates, pentanes plus, petroleum coke, and waxes.

<sup>d</sup> Includes Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and United Arab Emirates.

(s) = Less than 500 barrels per day.

Note: Totals may not equal sum of components due to independent rounding.

Source: Energy Information Administration (EIA) Form EIA-814, "Monthly Imports Report."



**Table 26. Imports of Residual Fuel Oil by Sulfur Content and by PAD District and State of Entry, 1996**  
(Thousand Barrels)

PAD District and State of Entry	Residual Fuel Oil			
	Less than 0.31% Sulfur	0.31 to 1.00% Sulfur	Greater than 1.00% Sulfur	Total
<b>PAD District I</b> .....	<b>16,343</b>	<b>19,010</b>	<b>46,690</b>	<b>82,043</b>
Connecticut .....	497	75	172	744
Delaware .....	0	502	2,394	2,896
Florida .....	332	272	9,998	10,602
Georgia .....	0	0	2,360	2,360
Maine .....	871	0	3,282	4,153
Maryland .....	0	1,298	1,465	2,763
Massachusetts .....	202	641	1,319	2,162
New Hampshire .....	0	0	436	436
New Jersey .....	5,949	7,209	7,933	21,091
New York .....	8,115	6,015	4,871	19,001
North Carolina .....	0	0	4,800	4,800
Pennsylvania .....	377	2,383	1,843	4,603
Rhode Island .....	0	31	0	31
South Carolina .....	0	391	2,549	2,940
Vermont .....	0	13	47	60
Virginia .....	0	180	3,221	3,401
<b>PAD District II</b> .....	<b>109</b>	<b>0</b>	<b>0</b>	<b>109</b>
Michigan .....	109	0	0	109
<b>PAD District III</b> .....	<b>1,744</b>	<b>2,180</b>	<b>3,392</b>	<b>7,316</b>
Louisiana .....	738	1,423	1,352	3,513
Mississippi .....	0	0	2,040	2,040
Texas .....	1,006	757	0	1,763
<b>PAD District V</b> .....	<b>699</b>	<b>470</b>	<b>217</b>	<b>1,386</b>
California .....	0	243	217	460
Hawaii .....	699	227	0	926
<b>U.S. Total</b> .....	<b>18,895</b>	<b>21,660</b>	<b>50,299</b>	<b>90,854</b>

Source: Energy Information Administration (EIA) Form EIA-814, "Monthly Imports Report."

**Table 27. Exports of Crude Oil and Petroleum Products by PAD District, 1996**  
(Thousand Barrels)

Commodity	Petroleum Administration for Defense Districts						Daily Average
	I	II	III	IV	V	U.S. Total	
Crude Oil <sup>a</sup> .....	(s)	5,887	0	(s)	34,324	40,211	110
Natural Gas Liquids .....	992	3,545	7,383	3	7,536	19,459	53
Pentanes Plus .....	43	838	1	0	2	883	2
Liquefied Petroleum Gases .....	949	2,707	7,382	3	7,535	18,576	51
Ethane/Ethylene .....	0	0	0	0	0	0	0
Propane/Propylene .....	452	714	6,208	0	2,846	10,220	28
Normal Butane/Butylene .....	497	1,993	1,174	3	4,689	8,355	23
Isobutane/Isobutylene .....	0	0	0	0	0	0	0
Other Liquids .....	379	51	6,985	(s)	455	7,869	22
Other Hydrocarbons/Oxygenates .....	15	23	4,269	(s)	12	4,320	12
Motor Gasoline Blend. Comp. ....	364	28	2,715	0	443	3,549	10
Finished Petroleum Products .....	13,099	6,223	174,414	176	97,446	291,358	796
Finished Motor Gasoline .....	617	198	33,389	27	3,896	38,127	104
Naphtha-Type Jet Fuel .....	1	1	243	0	461	705	2
Kerosene-Type Jet Fuel .....	750	117	9,497	0	6,604	16,968	46
Kerosene .....	202	7	339	0	245	793	2
Distillate Fuel Oil .....	3,390	277	37,246	0	28,690	69,603	190
Residual Fuel Oil .....	1,906	728	22,126	0	12,406	37,165	102
Special Naphthas .....	241	93	781	3	6,481	7,598	21
Lubricants .....	1,766	668	8,716	82	1,274	12,506	34
Waxes .....	201	214	391	49	148	1,002	3
Petroleum Coke .....	3,365	2,518	61,422	3	37,050	104,359	285
Asphalt and Road Oil .....	606	1,401	260	14	168	2,448	7
Miscellaneous Products .....	54	1	3	0	25	84	(s)
<b>Total</b> .....	<b>14,470</b>	<b>15,705</b>	<b>188,781</b>	<b>179</b>	<b>139,762</b>	<b>358,897</b>	<b>981</b>

<sup>a</sup> Crude oil exports are restricted to: (1) crude oil derived from fields under the State waters of Alaska's Cook Inlet; (2) certain domestically produced crude oil destined for Canada; and (3) shipments to U.S. territories, and California crude oil to Pacific Rim countries. On December 6, 1991, the U.S. Department of Commerce approved a license to export 25,000 barrels per day of California heavy crude oil (less than 20 degrees API gravity) to Pacific Rim countries for one year.

(s) = Less than 500 barrels or less than 500 barrels per day.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration (EIA) Form EIA-810, "Monthly Refinery Report" and the U.S. Bureau of the Census.



**Table 28. Exports of Crude Oil and Petroleum Products by Destination, 1996**  
(Thousand Barrels)

Destination	Crude Oil <sup>a</sup>	Pentanes Plus	Liquefied Petroleum Gases	Finished Motor Gasoline	Jet Fuel	Kerosene	Distillate Fuel Oil	Residual Fuel Oil
Argentina .....	0	0	1	35	108	0	292	0
Australia .....	0	0	5	2	0	(s)	5	(s)
Bahama Islands .....	0	0	177	399	308	1	1,533	1,306
Bahrain .....	0	0	(s)	0	0	0	(s)	0
Belgium & Luxembourg .....	0	0	7	3	0	0	9	0
Brazil .....	0	(s)	117	507	2,121	4	5,804	241
Cameroon .....	0	0	0	0	0	0	0	0
Canada .....	5,939	854	3,189	1,517	4,217	301	3,221	4,653
Chile .....	0	0	1	1,849	2	0	1,443	160
China, People's Republic of .....	801	0	854	239	0	0	927	1
China, Taiwan .....	2,612	0	91	0	573	2	4,808	1,200
Colombia .....	0	0	347	2,861	(s)	0	128	0
Costa Rica .....	0	0	1	154	20	0	230	2
Denmark .....	0	0	0	0	0	0	3	0
Dominican Republic .....	0	22	284	170	0	1	476	85
Ecuador .....	0	0	1,302	94	0	(s)	4	0
Egypt .....	0	0	0	2	0	0	1	265
El Salvador .....	0	2	504	396	0	0	406	113
Finland .....	0	0	0	0	0	0	1	(s)
France .....	0	0	(s)	0	0	(s)	1,457	419
French Pacific Islands .....	0	(s)	0	0	0	0	266	0
Germany, FR .....	0	1	1	(s)	(s)	(s)	310	0
Ghana .....	0	0	0	0	0	(s)	(s)	0
Greece .....	0	0	0	0	0	0	4	0
Guatemala .....	0	0	61	1,469	19	31	926	346
Guinea .....	0	0	0	0	1	0	1	0
Honduras .....	0	0	87	835	96	30	900	1,335
Hong Kong .....	27	(s)	3	1	149	2	309	295
India .....	0	0	(s)	0	0	0	235	0
Indonesia .....	0	0	0	0	0	3	9	0
Ireland .....	0	0	2	0	0	0	269	189
Israel .....	0	0	1	0	2,313	(s)	228	43
Italy .....	0	0	6	2	0	0	285	714
Jamaica .....	0	0	270	0	25	0	1,421	7,028
Japan .....	2,102	0	1,222	546	5,000	204	1,500	394
Korea, Republic of .....	7,663	(s)	910	1	1,260	3	9,268	407
Malaysia .....	0	1	0	0	0	0	13	0
Mexico .....	267	1	8,263	22,143	1	26	5,681	8,656
Netherlands .....	0	0	24	0	241	0	7,768	735
Netherlands Antilles .....	0	0	0	152	0	0	1,171	311
New Zealand .....	0	0	(s)	(s)	0	1	1	0
Nigeria .....	0	0	0	0	256	0	4	0
Norway .....	0	0	1	0	0	0	(s)	0
Panama .....	0	0	89	117	262	0	2,844	1,908
Peru .....	0	0	(s)	415	4	176	213	61
Philippines .....	0	0	422	0	0	0	3,778	0
Poland .....	0	0	0	0	0	0	0	0
Portugal .....	0	0	0	0	0	0	2	0
Puerto Rico .....	6	0	12	3,062	0	0	982	147
Russia .....	0	0	1	627	28	1	1,704	6
Saudi Arabia .....	0	0	1	0	0	0	4	0
Singapore .....	0	2	1	1	466	3	6,770	4,552
South Africa .....	0	0	0	0	0	0	479	0
Spain .....	0	0	1	39	0	1	141	0
Suriname .....	0	0	0	0	0	0	(s)	0
Sweden .....	0	1	0	1	0	0	5	1
Switzerland .....	0	0	3	0	0	0	1	5
Thailand .....	0	0	2	(s)	(s)	0	93	0
Trinidad and Tobago .....	0	0	1	(s)	0	0	287	0
Turkey .....	0	0	(s)	0	0	0	146	412
United Arab Emirates .....	0	0	0	(s)	0	0	2	0
United Kingdom .....	0	0	159	6	(s)	1	12	137
Uruguay .....	0	0	0	0	(s)	0	23	0
Venezuela .....	0	0	18	1	1	1	57	(s)
Virgin Islands .....	20,773	0	0	(s)	(s)	0	0	0
Yugoslavia .....	0	0	0	0	0	0	2	0
Other .....	20	0	132	479	202	(s)	739	1,036
<b>Total .....</b>	<b>40,211</b>	<b>883</b>	<b>18,576</b>	<b>38,127</b>	<b>17,673</b>	<b>793</b>	<b>69,603</b>	<b>37,165</b>

See footnotes at end of table.

**Table 28. Exports of Crude Oil and Petroleum Products by Destination, 1996 (Continued)**  
(Thousand Barrels)

Destination	Special Naphthas	Lubricants	Waxes	Petroleum Coke	Asphalt and Road Oil	Other Products <sup>b</sup>	Crude Oil and Products	
							Total	Daily Average
Argentina .....	12	151	8	3	4	424	1,037	3
Australia .....	12	109	7	4,176	7	1	4,324	12
Bahama Islands .....	(s)	72	0	0	19	(s)	3,816	10
Bahrain .....	0	1	0	764	1	0	766	2
Belgium & Luxembourg .....	6	88	4	9,634	7	6	9,763	27
Brazil .....	215	158	5	689	7	847	10,717	29
Cameroon .....	0	2	0	126	0	0	127	(s)
Canada .....	228	1,525	411	6,008	1,988	234	34,287	94
Chile .....	6	109	4	216	(s)	3	3,794	10
China, People's Republic of .....	(s)	117	10	0	4	1	2,955	8
China, Taiwan .....	9	297	5	22	2	1	9,622	26
Colombia .....	1	76	6	1	8	5	3,432	9
Costa Rica .....	14	232	5	0	(s)	100	758	2
Denmark .....	(s)	1	1	1,185	(s)	0	1,191	3
Dominican Republic .....	13	193	1	88	21	(s)	1,354	4
Ecuador .....	2	31	2	0	(s)	1	1,437	4
Egypt .....	1	32	0	236	(s)	(s)	538	1
El Salvador .....	7	110	2	0	0	2	1,542	4
Finland .....	1	4	0	0	1	(s)	7	(s)
France .....	1	11	21	4,574	15	(s)	6,498	18
French Pacific Islands .....	(s)	1	(s)	0	(s)	0	268	1
Germany, FR .....	1	43	41	758	40	3	1,198	3
Ghana .....	0	2	0	338	0	0	341	1
Greece .....	(s)	16	(s)	1,611	(s)	(s)	1,632	4
Guatemala .....	16	258	12	0	0	10	3,149	9
Guinea .....	0	16	0	0	0	0	17	(s)
Honduras .....	11	98	2	0	1	86	3,481	10
Hong Kong .....	1	118	9	0	2	(s)	915	2
India .....	0	841	6	2	14	(s)	1,099	3
Indonesia .....	(s)	25	1	421	1	1	461	1
Ireland .....	1	(s)	6	278	0	1	746	2
Israel .....	2	33	(s)	945	1	(s)	3,566	10
Italy .....	23	17	11	10,625	2	1	11,686	32
Jamaica .....	18	14	2	263	12	125	9,177	25
Japan .....	5,947	229	51	20,182	15	86	37,479	102
Korea, Republic of .....	255	110	13	1,957	7	3	21,859	60
Malaysia .....	1	24	3	1	1	2	47	(s)
Mexico .....	55	1,434	292	1,725	134	3,834	52,511	143
Netherlands .....	7	52	3	6,932	26	60	15,847	43
Netherlands Antilles .....	(s)	1,270	(s)	0	1	232	3,137	9
New Zealand .....	(s)	20	2	727	1	(s)	752	2
Nigeria .....	(s)	173	(s)	0	1	(s)	435	1
Norway .....	0	5	(s)	881	1	(s)	888	2
Panama .....	(s)	44	1	126	(s)	58	5,449	15
Peru .....	4	26	2	2	2	1	905	2
Philippines .....	1	102	11	5	(s)	3	4,322	12
Poland .....	(s)	3	0	6	0	0	9	(s)
Portugal .....	0	1	0	934	0	(s)	937	3
Puerto Rico .....	582	186	15	(s)	1	298	5,292	14
Russia .....	7	50	0	0	(s)	(s)	2,423	7
Saudi Arabia .....	(s)	20	(s)	128	(s)	(s)	153	(s)
Singapore .....	1	272	2	83	5	227	12,384	34
South Africa .....	(s)	108	1	947	1	(s)	1,535	4
Spain .....	2	6	3	12,363	1	2	12,559	34
Suriname .....	0	1	0	0	0	(s)	2	(s)
Sweden .....	0	11	2	494	0	(s)	515	1
Switzerland .....	16	3	0	0	(s)	2	30	(s)
Thailand .....	48	111	2	(s)	2	7	266	1
Trinidad and Tobago .....	5	694	(s)	(s)	1	1	989	3
Turkey .....	(s)	37	(s)	5,674	1	(s)	6,271	17
United Arab Emirates .....	1	1,586	(s)	771	8	(s)	2,369	6
United Kingdom .....	1	43	9	2,719	45	2	3,135	9
Uruguay .....	(s)	14	(s)	0	0	1	40	(s)
Venezuela .....	3	27	6	1,938	18	1,075	3,145	9
Virgin Islands .....	0	(s)	(s)	0	(s)	201	20,975	57
Yugoslavia .....	0	2	0	0	0	0	4	(s)
Other .....	60	1,043	2	2,800	17	2	6,533	18
<b>Total .....</b>	<b>7,598</b>	<b>12,506</b>	<b>1,002</b>	<b>104,359</b>	<b>2,448</b>	<b>7,953</b>	<b>358,897</b>	<b>981</b>

<sup>a</sup> Crude oil exports are restricted to: (1) crude oil derived from fields under the State waters of Alaska's Cook Inlet; (2) certain domestically produced crude oil destined for Canada; and (3) shipments to U.S. territories, and California crude oil to Pacific Rim countries. On December 6, 1991, the U.S. Department of Commerce approved a license to export 25,000 barrels per day of California heavy crude oil (less than 20 degrees API gravity) to Pacific Rim countries for one year.

<sup>b</sup> Includes miscellaneous products, motor gasoline blending components, and other hydrocarbons and oxygenates.

(s) = Less than 500 barrels or less than 500 barrels per day.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration (EIA) Form EIA-810, "Monthly Refinery Report" and the U.S. Bureau of the Census.



**Table 29. Net Imports of Crude Oil and Petroleum Products into the United States by Country, 1996**  
(Thousand Barrels per Day)

Country	Crude Oil <sup>a</sup>	Liquefied Petroleum Gases	Finished Motor Gasoline	Jet Fuel	Distillate Fuel Oil	Residual Fuel Oil	Petroleum Coke	Lubricants	Other Products <sup>b</sup>	Total Products	Total Crude Oil and Products
<b>Arab OPEC</b> .....	<b>1,496</b>	<b>36</b>	<b>21</b>	<b>1</b>	<b>1</b>	<b>31</b>	<b>-2</b>	<b>-4</b>	<b>273</b>	<b>356</b>	<b>1,852</b>
Algeria .....	8	31	0	(s)	1	25	0	(s)	191	248	256
Iraq .....	1	0	0	0	0	0	0	0	0	0	1
Kuwait .....	235	0	0	(s)	(s)	0	(s)	(s)	(s)	1	236
Qatar .....	0	0	0	0	(s)	0	0	(s)	(s)	(s)	(s)
Saudi Arabia .....	1,248	5	21	0	(s)	6	(s)	(s)	82	114	1,362
United Arab Emirates .....	3	0	(s)	0	(s)	0	-2	-4	(s)	-6	-4
<b>Other OPEC</b> .....	<b>1,942</b>	<b>10</b>	<b>47</b>	<b>48</b>	<b>52</b>	<b>87</b>	<b>-6</b>	<b>-1</b>	<b>163</b>	<b>399</b>	<b>2,342</b>
Indonesia .....	44	0	0	(s)	(s)	9	-1	(s)	6	14	58
Nigeria .....	595	0	0	-1	(s)	14	0	(s)	8	21	616
Venezuela .....	1,303	10	47	49	52	64	-5	(s)	149	365	1,667
<b>Non OPEC</b> .....	<b>3,960</b>	<b>70</b>	<b>164</b>	<b>13</b>	<b>-13</b>	<b>29</b>	<b>-275</b>	<b>-18</b>	<b>374</b>	<b>345</b>	<b>4,305</b>
Angola .....	344	0	0	0	1	4	0	(s)	2	8	351
Argentina .....	45	(s)	(s)	(s)	-1	2	(s)	(s)	8	9	54
Australia .....	25	(s)	(s)	0	(s)	(s)	-11	(s)	7	-5	20
Bahama Islands .....	0	(s)	-1	-1	-4	-2	0	(s)	(s)	-9	-9
Belgium & Luxembourg .....	0	(s)	3	0	(s)	1	-26	(s)	17	-6	-6
Benin .....	2	0	0	0	0	0	0	0	0	0	2
Brazil .....	0	(s)	2	-6	-16	(s)	-2	(s)	2	-20	-20
Brunei .....	0	0	0	0	0	0	0	(s)	0	(s)	(s)
Cameroon .....	2	0	0	0	0	2	(s)	(s)	1	2	4
Canada .....	1,059	94	82	-9	80	8	-16	-2	33	271	1,330
China, People's Republic of .....	55	-2	-1	0	-3	(s)	0	(s)	(s)	-6	49
China, Taiwan .....	-7	(s)	0	-2	-13	-3	(s)	-1	(s)	-19	-26
Colombia .....	226	-1	-8	1	(s)	6	(s)	(s)	1	-2	225
Congo .....	33	0	0	0	0	0	0	(s)	(s)	(s)	33
Ecuador .....	96	-4	(s)	0	(s)	4	0	(s)	4	4	100
Egypt .....	38	0	(s)	0	(s)	(s)	-1	(s)	5	4	42
France .....	0	(s)	2	0	-4	-1	-12	(s)	15	-1	-1
Gabon .....	184	0	0	0	0	0	0	(s)	0	(s)	184
Germany, FR .....	0	(s)	1	(s)	(s)	2	-2	(s)	9	11	11
Greece .....	0	0	0	0	(s)	0	-4	(s)	6	2	2
Guatemala .....	12	(s)	-4	(s)	-3	-1	0	-1	(s)	-9	4
India .....	0	(s)	0	0	-1	0	(s)	-2	4	1	1
Italy .....	0	(s)	2	0	-1	-1	-29	(s)	4	-24	-24
Jamaica .....	0	-1	0	(s)	-4	-19	-1	(s)	(s)	-25	-25
Japan .....	-6	-3	-1	-14	-4	-1	-55	-1	-17	-96	-102
Korea, Republic of .....	-21	-2	(s)	-3	-25	-1	-5	(s)	9	-29	-50
Malaysia .....	6	0	0	0	(s)	0	(s)	(s)	6	6	11
Mexico .....	1,206	-15	-61	3	-15	-24	-5	-4	15	-105	1,101
Netherlands .....	0	(s)	6	-1	-21	-2	-19	(s)	13	-24	-24
Netherlands Antilles .....	0	0	1	16	-2	6	0	-3	39	56	56
Norway .....	293	9	4	0	1	0	-2	(s)	7	18	310
Oman .....	35	(s)	0	0	0	0	0	(s)	1	1	36
Panama .....	0	(s)	(s)	-1	-8	-5	(s)	(s)	(s)	-14	-14
Peru .....	28	(s)	-1	(s)	-1	5	(s)	(s)	(s)	3	31
Puerto Rico .....	(s)	(s)	-7	0	-3	(s)	(s)	9	8	6	6
Romania .....	0	0	0	0	(s)	0	0	(s)	5	4	4
Russia .....	18	(s)	-1	(s)	-3	1	0	(s)	5	1	19
Spain .....	1	(s)	8	0	(s)	1	-34	(s)	19	-7	-6
Syria .....	0	0	0	0	(s)	0	0	(s)	(s)	(s)	(s)
Sweden .....	0	0	(s)	0	(s)	(s)	-1	(s)	4	2	2
Thailand .....	2	(s)	(s)	(s)	(s)	0	(s)	(s)	(s)	-1	1
Trinidad and Tobago .....	58	(s)	(s)	0	(s)	8	(s)	-2	10	15	73
Turkey .....	0	(s)	2	0	(s)	-1	-16	(s)	1	-14	-14
United Kingdom .....	216	1	36	(s)	(s)	4	-7	(s)	50	84	299
Virgin Islands .....	-57	0	98	38	81	53	0	(s)	44	313	256
Yemen .....	0	0	0	0	0	2	0	0	1	2	2
Zaire .....	15	0	0	0	0	0	0	(s)	0	(s)	15
Other .....	54	-4	2	-8	-43	-16	-25	-7	38	-63	-9
<b>Total</b> .....	<b>7,398</b>	<b>115</b>	<b>232</b>	<b>63</b>	<b>40</b>	<b>147</b>	<b>-284</b>	<b>-23</b>	<b>810</b>	<b>1,100</b>	<b>8,498</b>
<b>Persian Gulf<sup>c</sup></b> .....	<b>1,488</b>	<b>5</b>	<b>21</b>	<b>(s)</b>	<b>(s)</b>	<b>6</b>	<b>-4</b>	<b>-4</b>	<b>83</b>	<b>107</b>	<b>1,595</b>

<sup>a</sup> Includes crude oil imported for storage in the Strategic Petroleum Reserve.

<sup>b</sup> Includes asphalt and road oil, aviation gasoline, aviation gasoline blending components, kerosene, miscellaneous products, motor gasoline blending components, naphtha for petrochemical feedstock use, other hydrocarbons and oxygenates, other oils for petrochemical feedstock use, pentanes plus, special naphthas, unfinished oils, and waxes.

<sup>c</sup> Includes Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and United Arab Emirates.

(s) = Less than 500 barrels per day.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration (EIA) Forms EIA-810, "Monthly Refinery Report," and the U.S. Bureau of the Census.

**Table 30. Stocks of Crude Oil and Petroleum Products by PAD District, 1996**  
(Thousand Barrels)

Commodity	Petroleum Administration for Defense Districts					U. S. Total
	I	II	III	IV	V	
<b>Crude Oil</b> .....	<b>13,537</b>	<b>63,415</b>	<b>699,843</b>	<b>11,016</b>	<b>61,858</b>	<b>849,669</b>
Refinery .....	12,536	12,205	37,509	2,065	19,602	83,917
Tank Farms and Pipelines .....	983	50,167	82,263	8,116	28,950	170,479
Leases .....	18	1,043	14,255	835	763	16,914
Strategic Petroleum Reserve .....	0	0	565,816	0	0	565,816
Alaskan In Transit .....	0	0	0	0	12,543	12,543
<b>Total Stocks, All Oils (excluding Crude Oil)</b> .....	<b>160,326</b>	<b>147,106</b>	<b>240,348</b>	<b>16,705</b>	<b>93,262</b>	<b>657,747</b>
Refinery .....	47,387	53,947	128,447	11,253	65,077	306,111
Bulk Terminal .....	85,334	54,216	62,645	2,286	21,370	225,851
Pipeline .....	27,548	36,810	46,169	2,913	6,688	120,128
Natural Gas Processing Plant .....	57	2,133	3,087	253	127	5,657
<b>Pentanes Plus</b> .....	<b>30</b>	<b>1,924</b>	<b>4,202</b>	<b>170</b>	<b>40</b>	<b>6,366</b>
Refinery .....	0	340	215	1	0	556
Bulk Terminal .....	25	856	2,093	1	22	2,997
Pipeline .....	0	558	1,107	67	0	1,732
Natural Gas Processing Plant .....	5	170	787	101	18	1,081
<b>Liquefied Petroleum Gases</b> .....	<b>6,009</b>	<b>24,488</b>	<b>50,760</b>	<b>1,043</b>	<b>3,913</b>	<b>86,213</b>
Refinery .....	1,594	3,338	7,711	321	1,171	14,135
Bulk Terminal .....	2,422	12,239	27,466	55	2,633	44,815
Pipeline .....	1,941	6,948	13,283	515	0	22,687
Natural Gas Processing Plant .....	52	1,963	2,300	152	109	4,576
<b>Ethane/Ethylene</b> .....	<b>1</b>	<b>3,469</b>	<b>13,829</b>	<b>220</b>	<b>0</b>	<b>17,519</b>
Refinery .....	0	2	506	0	0	508
Bulk Terminal .....	1	1,607	9,948	0	0	11,556
Pipeline .....	0	1,399	2,987	217	0	4,603
Natural Gas Processing Plant .....	0	461	388	3	0	852
<b>Propane/Propylene</b> .....	<b>4,878</b>	<b>13,433</b>	<b>22,822</b>	<b>403</b>	<b>1,472</b>	<b>43,008</b>
Refinery .....	801	1,460	3,305	76	134	5,776
Bulk Terminal .....	2,100	7,411	10,270	52	1,246	21,079
Pipeline .....	1,941	3,817	8,264	188	0	14,210
Natural Gas Processing Plant .....	36	745	983	87	92	1,943
<b>Normal Butane/Butylene</b> .....	<b>947</b>	<b>5,581</b>	<b>9,123</b>	<b>277</b>	<b>2,064</b>	<b>17,992</b>
Refinery .....	616	1,334	2,585	156	693	5,384
Bulk Terminal .....	321	2,422	4,711	3	1,363	8,820
Pipeline .....	0	1,231	1,262	72	0	2,565
Natural Gas Processing Plant .....	10	594	565	46	8	1,223
<b>Isobutane/Isobutylene</b> .....	<b>183</b>	<b>2,005</b>	<b>4,986</b>	<b>143</b>	<b>377</b>	<b>7,694</b>
Refinery .....	177	542	1,315	89	344	2,467
Bulk Terminal .....	0	799	2,537	0	24	3,360
Pipeline .....	0	501	770	38	0	1,309
Natural Gas Processing Plant .....	6	163	364	16	9	558
<b>Other Hydrocarbons/Hydrogen/Oxygenates</b> .....	<b>1,876</b>	<b>1,659</b>	<b>5,119</b>	<b>187</b>	<b>4,291</b>	<b>13,132</b>
Refinery .....	1,666	515	2,523	93	3,274	8,071
Bulk Terminal .....	210	1,071	2,281	86	380	4,028
Pipeline .....	0	73	315	8	637	1,033
<b>Other Hydrocarbons/Hydrogen</b> .....	<b>0</b>	<b>16</b>	<b>1</b>	<b>0</b>	<b>7</b>	<b>24</b>
Refinery .....	0	16	1	0	7	24
<b>Fuel Ethanol</b> .....	<b>27</b>	<b>1,336</b>	<b>276</b>	<b>87</b>	<b>339</b>	<b>2,065</b>
Refinery .....	W	266	W	W	W	406
Bulk Terminal <sup>a</sup> .....	W	W	W	W	W	W
Pipeline .....	W	W	W	W	W	W
<b>ETBE</b> .....	<b>W</b>	<b>W</b>	<b>W</b>	<b>W</b>	<b>W</b>	<b>W</b>
Refinery .....	W	W	W	W	W	W
Bulk Terminal .....	W	W	W	W	W	W
Pipeline .....	W	W	W	W	W	W
<b>Methanol</b> .....	<b>W</b>	<b>W</b>	<b>W</b>	<b>W</b>	<b>W</b>	<b>688</b>
Refinery .....	W	W	W	W	W	688

See footnotes at end of table.



**Table 30. Stocks of Crude Oil and Petroleum Products by PAD District, 1996 (Continued)**  
(Thousand Barrels)

Commodity	Petroleum Administration for Defense Districts					U. S. Total
	I	II	III	IV	V	
<b>MTBE</b> .....	1,450	W	4,248	W	3,924	10,008
Refinery .....	1,240	W	2,116	W	3,225	6,832
Bulk Terminal .....	W	W	1,819	W	75	2,166
Pipeline .....	W	W	313	W	624	1,010
<b>Other Oxygenates<sup>b</sup></b> .....	W	W	W	W	W	W
Refinery .....	W	W	W	W	W	W
Bulk Terminal .....	W	W	W	W	W	W
Pipeline .....	W	W	W	W	W	W
<b>Unfinished Oils</b> .....	9,765	11,834	41,478	1,838	22,945	87,860
Refinery .....						
Naphthas and Lighter .....	1,692	2,755	9,340	388	3,754	17,929
Kerosene and Light Gas Oils .....	2,044	1,812	6,008	341	4,401	14,606
Heavy Gas Oils .....	4,746	4,217	17,332	834	11,908	39,037
Residuum .....	1,283	3,050	8,798	275	2,882	16,288
<b>Motor Gasoline Blending Components</b> .....	6,470	8,724	13,507	2,278	7,016	37,995
Refinery .....	6,312	7,357	12,407	2,275	6,944	35,295
Bulk Terminal .....	150	397	635	0	14	1,196
Pipeline .....	8	970	465	3	58	1,504
<b>Aviation Gasoline Blending Components</b> .....	193	28	22	0	11	254
Refinery .....	193	28	22	0	11	254
<b>Finished Motor Gasoline</b> .....	45,015	41,059	44,558	4,635	21,723	156,990
Refinery .....	7,967	8,346	17,736	2,272	10,221	46,542
Bulk Terminal .....	24,835	17,758	9,092	914	8,718	61,317
Pipeline .....	12,213	14,955	17,730	1,449	2,784	49,131
<b>Reformulated</b> .....	17,253	1,100	8,650	0	10,828	37,831
Refinery .....	5,310	389	3,289	0	5,579	14,567
Bulk Terminal .....	9,628	543	1,916	0	4,075	16,162
Pipeline .....	2,315	168	3,445	0	1,174	7,102
<b>Oxygenated</b> .....	358	944	1	280	4	1,587
Refinery .....	0	608	0	123	0	731
Bulk Terminal .....	262	322	1	128	3	716
Pipeline .....	96	14	0	29	1	140
<b>Other</b> .....	27,404	39,015	35,907	4,355	10,891	117,572
Refinery .....	2,657	7,349	14,447	2,149	4,642	31,244
Bulk Terminal .....	14,945	16,893	7,175	786	4,640	44,439
Pipeline .....	9,802	14,773	14,285	1,420	1,609	41,889
<b>Finished Aviation Gasoline</b> .....	817	426	434	24	571	2,272
Refinery .....	610	156	346	24	299	1,435
Bulk Terminal .....	207	180	74	0	272	733
Pipeline .....	0	90	14	0	0	104
<b>Naphtha-Type Jet Fuel</b> .....	0	37	0	25	24	86
Refinery .....	0	0	0	0	24	24
Bulk Terminal .....	0	0	0	0	0	0
Pipeline .....	0	37	0	25	0	62
<b>Kerosene-Type Jet Fuel</b> .....	9,678	8,622	12,993	778	7,708	39,779
Refinery .....	1,173	2,805	6,268	345	4,108	14,699
Bulk Terminal .....	3,742	2,080	2,009	248	2,163	10,242
Pipeline .....	4,763	3,737	4,716	185	1,437	14,838

See footnotes at end of table.

Table 30. Stocks of Crude Oil and Petroleum Products by PAD District, 1996 (Continued)  
(Thousand Barrels)

Commodity	Petroleum Administration for Defense Districts					U. S. Total
	I	II	III	IV	V	
<b>Kerosene</b> .....	4,472	1,408	911	125	105	7,021
Refinery .....	595	509	413	80	92	1,689
Bulk Terminal .....	3,524	814	378	0	7	4,723
Pipeline .....	353	85	120	45	6	609
<b>Distillate Fuel Oil</b> .....	47,390	32,094	31,501	2,891	12,853	126,729
Refinery .....	8,074	9,056	16,534	1,661	6,673	41,998
Bulk Terminal .....	31,046	13,687	6,564	622	4,588	56,507
Pipeline .....	8,270	9,351	8,403	608	1,592	28,224
<b>0.05 Percent Sulfur and Under</b> .....	19,079	22,399	15,502	2,456	8,951	68,387
Refinery .....	2,451	5,194	6,914	1,316	4,774	20,649
Bulk Terminal .....	12,838	10,038	4,010	555	3,089	30,530
Pipeline .....	3,790	7,167	4,578	585	1,088	17,208
<b>Greater than 0.05 Percent Sulfur</b> .....	28,311	9,695	15,999	435	3,902	58,342
Refinery .....	5,623	3,862	9,620	345	1,899	21,349
Bulk Terminal .....	18,208	3,649	2,554	67	1,499	25,977
Pipeline .....	4,480	2,184	3,825	23	504	11,016
<b>Residual Fuel Oil<sup>c</sup></b> .....	21,780	1,891	15,493	425	6,331	45,920
Refinery .....	5,693	1,262	6,078	425	4,389	17,847
Bulk Terminal .....	16,087	629	9,415	0	1,768	27,899
Pipeline .....	0	0	0	0	174	174
<b>Less than 0.31% Sulfur</b> .....	7,134	93	392	11	459	8,089
Refinery .....	2,549	6	104	11	403	3,073
Bulk Terminal .....	4,585	87	288	0	56	5,016
<b>0.31 to 1.00% Sulfur</b> .....	7,621	439	5,774	317	1,068	15,219
Refinery .....	1,967	188	1,440	317	755	4,667
Bulk Terminal .....	5,654	251	4,334	0	313	10,552
<b>Greater than 1.00% Sulfur</b> .....	7,025	1,359	9,327	97	4,630	22,438
Refinery .....	1,177	1,068	4,534	97	3,231	10,107
Bulk Terminal .....	5,848	291	4,793	0	1,399	12,331
<b>Naphtha for Petrochemical Feedstock Use</b> .....	381	213	1,064	0	115	1,773
Refinery .....	381	213	1,064	0	115	1,773
<b>Other Oils for Petrochemical Feedstock Use</b> .....	0	0	1,257	0	170	1,427
Refinery .....	0	0	1,257	0	170	1,427
<b>Special Naphthas</b> .....	118	228	1,498	1	45	1,890
Refinery .....	97	228	1,284	1	45	1,655
Bulk Terminal .....	21	0	214	0	0	235
<b>Lubricants</b> .....	2,419	1,615	7,073	0	1,567	12,674
Refinery .....	989	785	5,835	0	1,086	8,695
Bulk Terminal .....	1,430	830	1,238	0	481	3,979
<b>Waxes</b> .....	212	165	388	14	135	914
Refinery .....	212	165	388	14	135	914
<b>Petroleum Coke</b> .....	473	1,523	3,140	186	1,358	6,680
Refinery .....	473	1,523	3,140	186	1,358	6,680
<b>Asphalt and Road Oil</b> .....	3,124	8,921	4,213	2,066	2,159	20,483
Refinery .....	1,539	5,368	3,445	1,717	1,854	13,923
Bulk Terminal .....	1,585	3,553	768	349	305	6,560
<b>Miscellaneous Products</b> .....	104	247	737	19	182	1,289
Refinery .....	54	119	303	0	163	639
Bulk Terminal .....	50	122	418	11	19	620
Pipeline .....	0	6	16	8	0	30
<b>Total Stocks, All Oils</b> .....	173,863	210,521	940,191	27,721	155,120	1,507,416

<sup>a</sup> Includes stocks held by producers.

<sup>b</sup> Includes tertiary amyl methyl ether (TAME), tertiary butyl alcohol (TBA), and other aliphatic alcohols and ethers Intended for motor gasoline blending (e.g., isopropyl ether (IPE) or n-propanol).

<sup>c</sup> Sulfur content not available for stocks held by pipelines.

W = Withheld to avoid disclosure of individual company data.

Note: Stocks are reported as of the end of December.

Sources: Energy Information Administration (EIA) Forms EIA-810, "Monthly Refinery Report," EIA-811, "Monthly Bulk Terminal Report," EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," and EIA-816, "Monthly Natural Gas Liquids Report."



**Table 31. Refinery, Bulk Terminal, and Natural Gas Plant Stocks of Selected Petroleum Products by PAD District and State, 1996**  
(Thousand Barrels)

PAD District and State	Motor Gasoline				Kerosene	Distillate Fuel Oil			Residual Fuel	Propane/Propylene
	Total	Reformulated	Oxygenated	Other		Total	0.05% Sulfur and Under	Greater than 0.05% Sulfur		
<b>PAD District I</b> .....	<b>32,802</b>	<b>14,938</b>	<b>262</b>	<b>17,602</b>	<b>4,119</b>	<b>39,120</b>	<b>15,289</b>	<b>23,831</b>	<b>21,780</b>	<b>2,937</b>
Connecticut .....	976	976	0	0	111	2,712	1,078	1,634	134	W
Delaware, D.C., Maryland .....	2,059	1,650	0	409	167	2,124	838	1,286	3,492	W
Florida .....	4,037	0	0	4,037	117	1,739	1,150	589	1,226	59
Georgia .....	1,506	0	0	1,506	57	1,125	817	308	208	W
Maine, New Hampshire, Vermont .....	1,098	593	0	505	279	2,539	822	1,717	764	W
Massachusetts .....	1,637	1,637	0	0	552	3,566	830	2,736	1,585	W
New Jersey .....	7,046	5,558	1	1,487	659	8,193	3,128	5,065	8,320	W
New York .....	3,208	1,124	153	1,931	988	6,425	1,709	4,716	2,930	W
North Carolina .....	2,102	0	0	2,102	215	1,631	917	714	409	W
Pennsylvania .....	4,767	1,312	108	3,347	710	5,415	2,051	3,364	1,259	W
Rhode Island .....	695	695	0	0	W	704	205	499	W	W
South Carolina .....	969	0	0	969	140	909	563	346	W	W
Virginia .....	2,466	1,393	0	1,073	111	1,896	1,055	841	762	W
West Virginia .....	236	0	0	236	W	142	126	16	W	W
<b>PAD District II</b> .....	<b>26,104</b>	<b>932</b>	<b>930</b>	<b>24,242</b>	<b>1,323</b>	<b>22,743</b>	<b>15,232</b>	<b>7,511</b>	<b>1,891</b>	<b>9,616</b>
Illinois .....	3,284	269	89	2,926	196	3,444	2,526	918	714	717
Indiana .....	2,575	81	92	2,402	217	2,576	1,458	1,118	108	W
Iowa .....	1,266	0	0	1,266	W	1,299	1,126	173	W	W
Kansas, Nebraska .....	2,365	0	0	2,365	21	2,123	1,519	604	11	4,198
Kentucky .....	1,188	217	128	843	72	1,433	744	689	W	W
Michigan .....	2,840	0	41	2,799	163	1,857	1,454	403	65	2,130
Minnesota .....	1,701	84	267	1,350	W	1,285	1,021	264	168	W
Missouri .....	960	0	0	960	W	863	700	163	W	W
North Dakota, South Dakota .....	519	0	1	518	W	929	495	434	W	W
Ohio .....	4,075	65	7	4,003	450	2,412	1,369	1,043	163	W
Oklahoma .....	1,852	0	3	1,849	W	1,410	782	628	148	654
Tennessee .....	1,759	0	104	1,655	49	1,391	950	441	260	W
Wisconsin .....	1,720	216	198	1,306	W	1,721	1,088	633	44	W
<b>PAD District III</b> .....	<b>26,828</b>	<b>5,205</b>	<b>1</b>	<b>21,622</b>	<b>791</b>	<b>23,098</b>	<b>10,924</b>	<b>12,174</b>	<b>15,493</b>	<b>14,558</b>
Alabama .....	1,093	0	0	1,093	58	979	609	370	272	113
Arkansas .....	867	0	0	867	W	723	408	315	W	W
Louisiana .....	5,187	558	0	4,629	127	5,563	2,261	3,302	7,255	2,868
Mississippi .....	2,054	27	0	2,027	352	2,105	700	1,405	W	3,858
New Mexico .....	418	0	1	417	W	325	270	55	8	W
Texas .....	17,209	4,620	0	12,589	226	13,403	6,676	6,727	7,644	7,574
<b>PAD District IV</b> .....	<b>3,186</b>	<b>0</b>	<b>251</b>	<b>2,935</b>	<b>80</b>	<b>2,283</b>	<b>1,871</b>	<b>412</b>	<b>425</b>	<b>215</b>
Colorado .....	718	0	251	467	W	366	309	57	W	W
Idaho .....	217	0	0	217	W	232	172	60	W	W
Montana .....	1,060	0	0	1,060	W	675	675	0	42	10
Utah .....	572	0	0	572	W	520	288	232	58	112
Wyoming .....	619	0	0	619	W	490	427	63	W	54
<b>PAD District V</b> .....	<b>18,939</b>	<b>9,654</b>	<b>3</b>	<b>9,282</b>	<b>99</b>	<b>11,261</b>	<b>7,863</b>	<b>3,398</b>	<b>6,157</b>	<b>1,472</b>
Alaska .....	639	0	0	639	W	892	77	815	W	W
Arizona .....	1,007	0	2	1,005	W	284	222	62	W	W
California .....	11,463	9,654	0	1,809	92	6,494	5,538	956	3,603	520
Hawaii .....	721	0	0	721	W	590	204	386	W	W
Nevada .....	222	0	1	221	W	214	181	33	W	W
Oregon .....	1,572	0	0	1,572	W	950	694	256	352	W
Washington .....	3,315	0	0	3,315	W	1,837	947	890	895	203
<b>U.S. Total</b> .....	<b>107,859</b>	<b>30,729</b>	<b>1,447</b>	<b>75,683</b>	<b>6,412</b>	<b>98,505</b>	<b>51,179</b>	<b>47,326</b>	<b>45,746</b>	<b>28,798</b>

W = Withheld to avoid disclosure of individual company data.

Notes: • Stocks are reported as of the end of December. • Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration (EIA) Forms EIA-810, "Monthly Refinery Report," EIA-811, "Monthly Bulk Terminal Report," and EIA-816, "Monthly Natural Gas Liquids Report."

**Table 32. Movements of Crude Oil and Petroleum Products by Pipeline, Tanker, and Barge Between PAD Districts, 1996**  
(Thousand Barrels)

Commodity	From I to			From II to				From III to	
	II	III	V	I	III	IV	V	I	II
Crude Oil .....	713	7,944	0	1,587	12,556	8,347	0	0	701,651
<b>Petroleum Products .....</b>	<b>103,438</b>	<b>1,178</b>	<b>0</b>	<b>43,115</b>	<b>69,892</b>	<b>35,081</b>	<b>0</b>	<b>1,122,126</b>	<b>337,169</b>
Pentanes Plus .....	0	0	0	0	3,248	3	0	0	7,930
Liquefied Petroleum Gases .....	50	0	0	13,163	54,213	1,199	0	30,624	52,086
Unfinished Oils .....	272	0	0	315	303	0	0	83	1,203
Motor Gasoline Blending Components .....	19	437	0	66	102	0	0	6,496	20,065
Finished Motor Gasoline .....	69,287	29	0	15,748	6,231	14,691	0	629,138	141,863
Reformulated .....	28	0	0	0	2,224	0	0	132,006	2,331
Oxygenated .....	44	0	0	2,002	0	148	0	0	0
Other .....	69,215	29	0	13,746	4,007	14,543	0	497,132	139,532
Finished Aviation Gasoline .....	0	0	0	0	0	149	0	745	1,051
Jet Fuel .....	3,471	0	0	1,772	272	11,744	0	156,233	49,417
Naphtha-Type .....	0	0	0	0	0	0	0	0	0
Kerosene-Type .....	3,471	0	0	1,772	272	11,744	0	156,233	49,417
Kerosene .....	530	0	0	817	0	0	0	2,311	441
Distillate Fuel Oil .....	29,776	376	0	8,670	2,590	7,295	0	268,836	53,962
0.05 percent sulfur and under .....	23,108	125	0	3,627	2,353	7,147	0	158,518	46,390
Greater than 0.05 percent sulfur .....	6,668	251	0	5,043	237	148	0	110,318	7,572
Residual Fuel Oil .....	21	0	0	441	2,481	0	0	15,716	19
Petrochemical Feedstocks <sup>a</sup> .....	12	0	0	0	40	0	0	50	378
Special Naphthas .....	0	45	0	0	0	0	0	1,019	1,004
Lubricants .....	0	281	0	767	162	0	0	8,446	3,321
Waxes .....	0	0	0	0	0	0	0	0	0
Asphalt and Road Oil .....	0	0	0	1,356	250	0	0	2,365	4,429
Miscellaneous Products .....	0	10	0	0	0	0	0	64	0
<b>Total .....</b>	<b>104,151</b>	<b>9,122</b>	<b>0</b>	<b>44,702</b>	<b>82,448</b>	<b>43,428</b>	<b>0</b>	<b>1,122,126</b>	<b>1,038,820</b>

Commodity	From III to		From IV to			From V to			
	IV	V	II	III	V	I	II	III	IV
Crude Oil .....	0	0	14,265	10,634	0	0	0	64,966	0
<b>Petroleum Products .....</b>	<b>5,813</b>	<b>30,640</b>	<b>28,961</b>	<b>31,210</b>	<b>8,816</b>	<b>979</b>	<b>0</b>	<b>2,402</b>	<b>0</b>
Pentanes Plus .....	0	0	1,918	2,972	0	0	0	0	0
Liquefied Petroleum Gases .....	0	0	14,750	28,238	0	0	0	0	0
Unfinished Oils .....	0	459	0	0	0	0	0	1,329	0
Motor Gasoline Blending Components .....	0	508	0	0	0	0	0	434	0
Finished Motor Gasoline .....	4,205	21,244	7,433	0	8,099	979	0	0	0
Reformulated .....	0	2,157	0	0	0	0	0	0	0
Oxygenated .....	0	0	0	0	0	0	0	0	0
Other .....	4,205	19,087	7,433	0	8,099	979	0	0	0
Finished Aviation Gasoline .....	0	0	0	0	0	0	0	0	0
Jet Fuel .....	1,133	3,812	448	0	453	0	0	97	0
Naphtha-Type .....	0	0	0	0	453	0	0	0	0
Kerosene-Type .....	1,133	3,812	448	0	0	0	0	97	0
Kerosene .....	0	0	236	0	0	0	0	0	0
Distillate Fuel Oil .....	475	4,335	4,176	0	264	0	0	0	0
0.05 percent sulfur and under .....	475	2,274	4,176	0	167	0	0	0	0
Greater than 0.05 percent sulfur .....	0	2,061	0	0	97	0	0	0	0
Residual Fuel Oil .....	0	0	0	0	0	0	0	0	0
Petrochemical Feedstocks <sup>a</sup> .....	0	0	0	0	0	0	0	0	0
Special Naphthas .....	0	0	0	0	0	0	0	0	0
Lubricants .....	0	282	0	0	0	0	0	542	0
Waxes .....	0	0	0	0	0	0	0	0	0
Asphalt and Road Oil .....	0	0	0	0	0	0	0	0	0
Miscellaneous Products .....	0	0	0	0	0	0	0	0	0
<b>Total .....</b>	<b>5,813</b>	<b>30,640</b>	<b>43,226</b>	<b>41,844</b>	<b>8,816</b>	<b>979</b>	<b>0</b>	<b>67,368</b>	<b>0</b>

<sup>a</sup> Includes naphtha less than 401° F endpoint and other oils equal to or greater than 401° F endpoint.

Sources: Energy Information Administration (EIA) Forms EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," and EIA-817, "Monthly Tanker and Barge Movement Report."



**Table 33. Movements of Crude Oil and Petroleum Products by Pipeline Between PAD Districts, 1996**  
(Thousand Barrels)

Commodity	From I to		From II to			From III to	
	II	III	I	III	IV	I	II
Crude Oil .....	0	7,944	0	12,556	8,347	0	701,651
<b>Petroleum Products .....</b>	<b>103,020</b>	<b>0</b>	<b>22,738</b>	<b>64,499</b>	<b>35,081</b>	<b>835,094</b>	<b>295,661</b>
Pentanes Plus .....	0	0	0	3,248	3	0	7,930
Liquefied Petroleum Gases .....	0	0	13,163	54,213	1,199	27,849	52,029
Motor Gasoline Blending Components .....	0	0	66	0	0	83	19,895
Finished Motor Gasoline .....	69,243	0	6,002	5,651	14,691	462,882	122,532
Reformulated .....	28	0	0	2,224	0	124,066	2,224
Oxygenated .....	0	0	0	0	148	0	0
Other .....	69,215	0	6,002	3,427	14,543	338,816	120,308
Finished Aviation Gasoline .....	0	0	0	0	149	0	830
Jet Fuel .....	3,471	0	1,032	272	11,744	124,778	47,645
Naphtha-Type .....	0	0	0	0	0	0	0
Kerosene-Type .....	3,471	0	1,032	272	11,744	124,778	47,645
Kerosene .....	530	0	11	0	0	1,149	247
Distillate Fuel Oil .....	29,776	0	2,464	1,115	7,295	218,353	44,553
0.05 percent sulfur and under .....	23,108	0	1,075	941	7,147	128,357	41,242
Greater than 0.05 percent sulfur .....	6,668	0	1,389	174	148	89,996	3,311
Residual Fuel Oil .....	0	0	0	0	0	0	0
Miscellaneous Products .....	0	0	0	0	0	0	0
<b>Total .....</b>	<b>103,020</b>	<b>7,944</b>	<b>22,738</b>	<b>77,055</b>	<b>43,428</b>	<b>835,094</b>	<b>997,312</b>

Commodity	From III to		From IV to			From V to	
	IV	V	II	III	V	III	IV
Crude Oil .....	0	0	14,265	10,634	0	62,748	0
<b>Petroleum Products .....</b>	<b>5,813</b>	<b>24,659</b>	<b>28,961</b>	<b>31,210</b>	<b>8,816</b>	<b>0</b>	<b>0</b>
Pentanes Plus .....	0	0	1,918	2,972	0	0	0
Liquefied Petroleum Gases .....	0	0	14,750	28,238	0	0	0
Motor Gasoline Blending Components .....	0	0	0	0	0	0	0
Finished Motor Gasoline .....	4,205	17,001	7,433	0	8,099	0	0
Reformulated .....	0	0	0	0	0	0	0
Oxygenated .....	0	0	0	0	0	0	0
Other .....	4,205	17,001	7,433	0	8,099	0	0
Finished Aviation Gasoline .....	0	0	0	0	0	0	0
Jet Fuel .....	1,133	3,812	448	0	453	0	0
Naphtha-Type .....	0	0	0	0	453	0	0
Kerosene-Type .....	1,133	3,812	448	0	0	0	0
Kerosene .....	0	0	236	0	0	0	0
Distillate Fuel Oil .....	475	3,846	4,176	0	264	0	0
0.05 percent sulfur and under .....	475	2,274	4,176	0	167	0	0
Greater than 0.05 percent sulfur .....	0	1,572	0	0	97	0	0
Residual Fuel Oil .....	0	0	0	0	0	0	0
Miscellaneous Products .....	0	0	0	0	0	0	0
<b>Total .....</b>	<b>5,813</b>	<b>24,659</b>	<b>43,226</b>	<b>41,844</b>	<b>8,816</b>	<b>62,748</b>	<b>0</b>

Sources: Energy Information Administration (EIA) Forms EIA-812, "Monthly Product Pipeline Report," and EIA-813, Monthly Crude Oil Report."

**Table 34. Movements of Crude Oil and Petroleum Products by Tanker and Barge Between PAD Districts, 1996**  
(Thousand Barrels)

Commodity	From I to			From II to			From III to	
	II	III	V	I	III	V	I	New England
Crude Oil .....	713	0	0	1,587	0	0	0	0
<b>Petroleum Products .....</b>	<b>418</b>	<b>1,178</b>	<b>0</b>	<b>20,377</b>	<b>5,393</b>	<b>0</b>	<b>287,032</b>	<b>15,974</b>
Liquefied Petroleum Gases .....	50	0	0	0	0	0	2,775	0
Unfinished Oils .....	272	0	0	315	303	0	83	0
Motor Gasoline Blending Components .....	19	437	0	0	102	0	6,413	0
Finished Motor Gasoline .....	44	29	0	9,746	580	0	166,256	8,081
Reformulated .....	0	0	0	0	0	0	7,940	6,640
Oxygenated .....	44	0	0	2,002	0	0	0	0
Other .....	0	29	0	7,744	580	0	158,316	1,441
Finished Aviation Gasoline .....	0	0	0	0	0	0	745	65
Jet Fuel .....	0	0	0	740	0	0	31,455	836
Naphtha-Type .....	0	0	0	0	0	0	0	0
Kerosene-Type .....	0	0	0	740	0	0	31,455	836
Kerosene .....	0	0	0	806	0	0	1,162	0
Distillate Fuel Oil .....	0	376	0	6,206	1,475	0	50,483	6,715
0.05 percent sulfur and under .....	0	125	0	2,552	1,412	0	30,161	750
Greater than 0.05 percent sulfur .....	0	251	0	3,654	63	0	20,322	5,965
Residual Fuel Oil .....	21	0	0	441	2,481	0	15,716	277
Less than 0.31 percent sulfur .....	0	0	0	0	0	0	0	0
0.31 to 1.00 percent sulfur .....	0	0	0	0	0	0	64	0
Greater than 1.00 percent sulfur .....	21	0	0	441	2,481	0	15,652	277
Petrochemical Feedstocks <sup>a</sup> .....	12	0	0	0	40	0	50	0
Special Naphthas .....	0	45	0	0	0	0	1,019	0
Lubricants .....	0	281	0	767	162	0	8,446	0
Waxes .....	0	0	0	0	0	0	0	0
Asphalt and Road Oil .....	0	0	0	1,356	250	0	2,365	0
Miscellaneous Products .....	0	10	0	0	0	0	64	0
<b>Total .....</b>	<b>1,131</b>	<b>1,178</b>	<b>0</b>	<b>21,964</b>	<b>5,393</b>	<b>0</b>	<b>287,032</b>	<b>15,974</b>

Commodity	From III to				From V to		
	Central Atlantic	Lower Atlantic	II	V	I	II	III
Crude Oil .....	0	0	0	0	0	0	2,218
<b>Petroleum Products .....</b>	<b>19,003</b>	<b>252,055</b>	<b>41,508</b>	<b>5,981</b>	<b>979</b>	<b>0</b>	<b>2,402</b>
Liquefied Petroleum Gases .....	0	2,775	57	0	0	0	0
Unfinished Oils .....	0	83	1,203	459	0	0	1,329
Motor Gasoline Blending Components .....	6,181	232	170	508	0	0	434
Finished Motor Gasoline .....	2,332	155,843	19,331	4,243	979	0	0
Reformulated .....	1,300	0	107	2,157	0	0	0
Oxygenated .....	0	0	0	0	0	0	0
Other .....	1,032	155,843	19,224	2,086	979	0	0
Finished Aviation Gasoline .....	173	507	221	0	0	0	0
Jet Fuel .....	438	30,181	1,772	0	0	0	97
Naphtha-Type .....	0	0	0	0	0	0	0
Kerosene-Type .....	438	30,181	1,772	0	0	0	97
Kerosene .....	133	1,029	194	0	0	0	0
Distillate Fuel Oil .....	4,324	39,444	9,409	489	0	0	0
0.05 percent sulfur and under .....	1,628	27,783	5,148	0	0	0	0
Greater than 0.05 percent sulfur .....	2,696	11,661	4,261	489	0	0	0
Residual Fuel Oil .....	1,430	14,009	19	0	0	0	0
Less than 0.31 percent sulfur .....	0	0	0	0	0	0	0
0.31 to 1.00 percent sulfur .....	0	64	0	0	0	0	0
Greater than 1.00 percent sulfur .....	1,430	13,945	19	0	0	0	0
Petrochemical Feedstocks <sup>a</sup> .....	50	0	378	0	0	0	0
Special Naphthas .....	0	1,019	1,004	0	0	0	0
Lubricants .....	3,878	4,568	3,321	282	0	0	542
Waxes .....	0	0	0	0	0	0	0
Asphalt and Road Oil .....	0	2,365	4,429	0	0	0	0
Miscellaneous Products .....	64	0	0	0	0	0	0
<b>Total .....</b>	<b>19,003</b>	<b>252,055</b>	<b>41,508</b>	<b>5,981</b>	<b>979</b>	<b>0</b>	<b>4,620</b>

<sup>a</sup> Includes naphtha less than 401° F endpoint and other oils equal to or greater than 401° F endpoint.

Source: Energy Information Administration (EIA) Form EIA-817, "Monthly Tanker and Barge Movement Report."



**Table 35. Net Movements of Crude Oil and Petroleum Products by Pipeline, Tanker, and Barge Between PAD Districts, 1996**  
(Thousand Barrels)

Commodity	PAD District I			PAD District II		
	Receipts	Shipments	Net Receipts	Receipts	Shipments	Net Receipts
Crude Oil .....	1,587	8,657	-7,070	716,629	22,490	694,139
<b>Petroleum Products .....</b>	<b>1,166,220</b>	<b>104,616</b>	<b>1,061,604</b>	<b>469,568</b>	<b>148,088</b>	<b>321,480</b>
Pentanes Plus .....	0	0	0	9,848	3,251	6,597
Liquefied Petroleum Gases .....	43,787	50	43,737	66,886	68,575	-1,689
Ethane/Ethylene .....	0	0	0	9,610	30,982	-21,372
Propane/Propylene .....	43,631	0	43,631	43,289	26,594	16,695
Normal Butane/Butylene .....	156	50	106	7,859	8,831	-972
Isobutane/Isobutylene .....	0	0	0	6,128	2,168	3,960
Unfinished Oils .....	398	272	126	1,475	618	857
Motor Gasoline Blending Components .....	6,562	456	6,106	20,084	168	19,916
Finished Motor Gasoline .....	645,865	69,316	576,549	218,583	36,670	181,913
Reformulated .....	132,006	28	131,978	2,359	2,224	135
Oxygenated .....	2,002	44	1,958	44	2,150	-2,106
Other .....	511,857	69,244	442,613	216,180	32,296	183,884
Finished Aviation Gasoline .....	745	0	745	1,051	149	902
Jet Fuel .....	158,005	3,471	154,534	53,336	13,788	39,548
Naphtha-Type .....	0	0	0	0	0	0
Kerosene-Type .....	158,005	3,471	154,534	53,336	13,788	39,548
Kerosene .....	3,128	530	2,598	1,207	817	390
Distillate Fuel Oil .....	277,506	30,152	247,354	87,914	18,555	69,359
0.05 percent sulfur and under .....	162,145	23,233	138,912	73,674	13,127	60,547
Greater than 0.05 percent sulfur .....	115,361	6,919	108,442	14,240	5,428	8,812
Residual Fuel Oil .....	16,157	21	16,136	40	2,922	-2,882
Petrochemical Feedstocks <sup>a</sup> .....	50	12	38	390	40	350
Special Naphthas .....	1,019	45	974	1,004	0	1,004
Lubricants .....	9,213	281	8,932	3,321	929	2,392
Waxes .....	0	0	0	0	0	0
Asphalt and Road Oil .....	3,721	0	3,721	4,429	1,606	2,823
Miscellaneous Products .....	64	10	54	0	0	0
<b>Total .....</b>	<b>1,167,807</b>	<b>113,273</b>	<b>1,054,534</b>	<b>1,186,197</b>	<b>170,578</b>	<b>1,015,619</b>

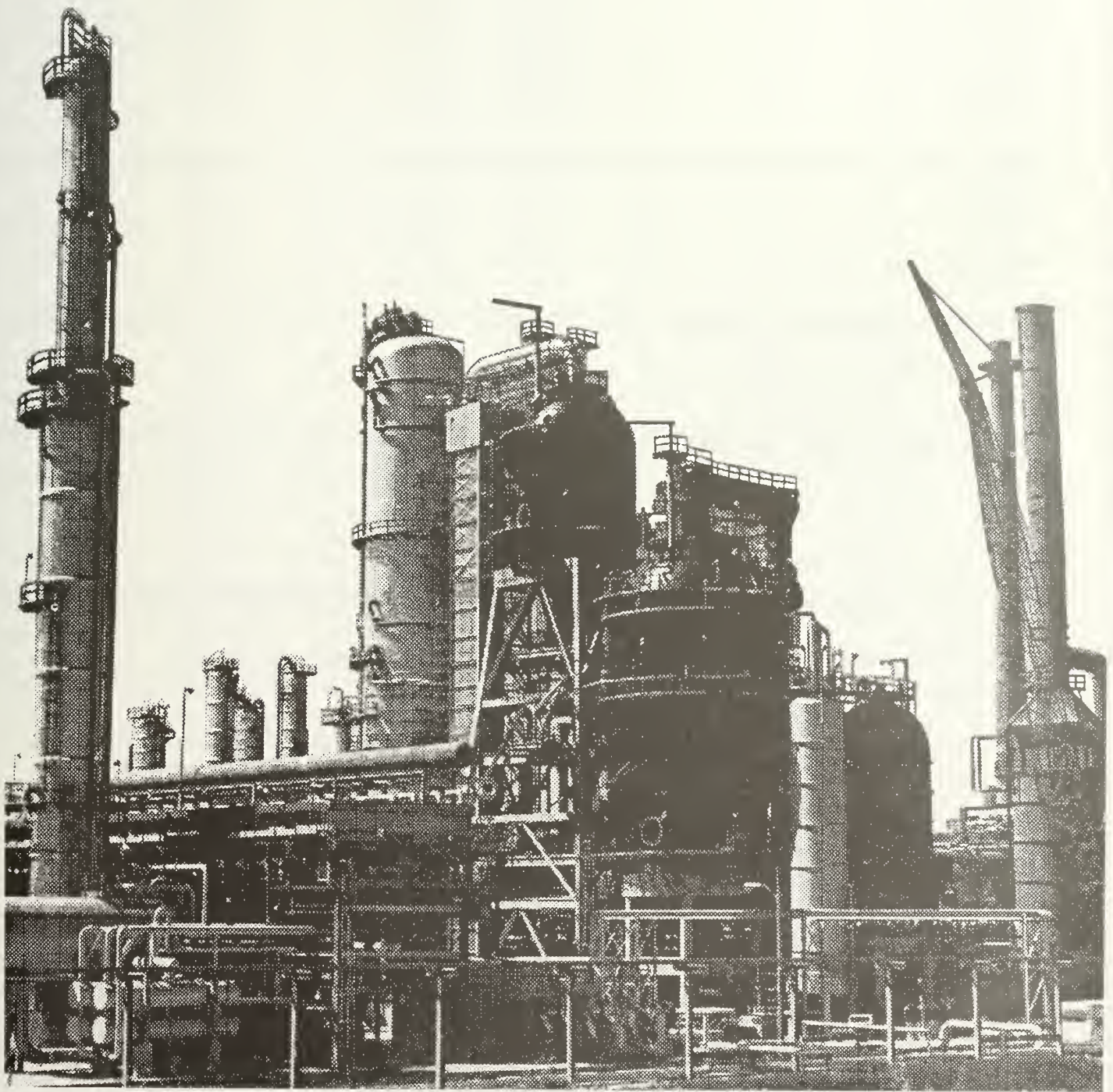
Commodity	PAD District III			PAD District IV			PAD District V		
	Receipts	Shipments	Net Receipts	Receipts	Shipments	Net Receipts	Receipts	Shipments	Net Receipts
Crude Oil .....	96,100	701,651	-605,551	8,347	24,899	-16,552	0	64,966	-64,966
<b>Petroleum Products .....</b>	<b>104,682</b>	<b>1,495,748</b>	<b>-1,391,066</b>	<b>40,894</b>	<b>68,987</b>	<b>-28,093</b>	<b>39,456</b>	<b>3,381</b>	<b>36,075</b>
Pentanes Plus .....	6,220	7,930	-1,710	3	4,890	-4,887	0	0	0
Liquefied Petroleum Gases .....	82,451	82,710	-259	1,199	42,988	-41,789	0	0	0
Ethane/Ethylene .....	46,840	3,050	43,790	0	22,418	-22,418	0	0	0
Propane/Propylene .....	19,677	68,981	-49,304	1,054	12,076	-11,022	0	0	0
Normal Butane/Butylene .....	11,500	5,585	5,915	144	5,193	-5,049	0	0	0
Isobutane/Isobutylene .....	4,434	5,094	-660	1	3,301	-3,300	0	0	0
Unfinished Oils .....	1,632	1,745	-113	0	0	0	459	1,329	-870
Motor Gasoline Blending Components .....	973	27,069	-26,096	0	0	0	508	434	74
Finished Motor Gasoline .....	6,260	796,450	-790,190	18,896	15,532	3,364	29,343	979	28,364
Reformulated .....	2,224	136,494	-134,270	0	0	0	2,157	0	2,157
Oxygenated .....	0	0	0	148	0	148	0	0	0
Other .....	4,036	659,956	-655,920	18,748	15,532	3,216	27,186	979	26,207
Finished Aviation Gasoline .....	0	1,796	-1,796	149	0	149	0	0	0
Jet Fuel .....	369	210,595	-210,226	12,877	901	11,976	4,265	97	4,168
Naphtha-Type .....	0	0	0	0	453	-453	453	0	453
Kerosene-Type .....	369	210,595	-210,226	12,877	448	12,429	3,812	97	3,715
Kerosene .....	0	2,752	-2,752	0	236	-236	0	0	0
Distillate Fuel Oil .....	2,966	327,608	-324,642	7,770	4,440	3,330	4,599	0	4,599
0.05 percent sulfur and under .....	2,478	207,657	-205,179	7,622	4,343	3,279	2,441	0	2,441
Greater than 0.05 percent sulfur .....	488	119,951	-119,463	148	97	51	2,158	0	2,158
Residual Fuel Oil .....	2,481	15,735	-13,254	0	0	0	0	0	0
Petrochemical Feedstocks <sup>a</sup> .....	40	428	-388	0	0	0	0	0	0
Special Naphthas .....	45	2,023	-1,978	0	0	0	0	0	0
Lubricants .....	985	12,049	-11,064	0	0	0	282	542	-260
Waxes .....	0	0	0	0	0	0	0	0	0
Asphalt and Road Oil .....	250	6,794	-6,544	0	0	0	0	0	0
Miscellaneous Products .....	10	64	-54	0	0	0	0	0	0
<b>Total .....</b>	<b>200,782</b>	<b>2,197,399</b>	<b>-1,996,617</b>	<b>49,241</b>	<b>93,886</b>	<b>-44,645</b>	<b>39,456</b>	<b>68,347</b>	<b>-28,891</b>

<sup>a</sup> Includes naphtha less than 401° F endpoint and other oils equal to or greater than 401° F endpoint.

Sources: Energy Information Administration (EIA) Forms EIA-812, "Monthly Product Pipeline Report," EIA-813, "Monthly Crude Oil Report," and EIA-817, "Monthly Tanker and Barge Movement Report."



## Refinery Capacity



*As part of the refining process, a catalytic cracking unit is used to increase the yield of gasoline from crude oil.*



**Table 36. Number and Capacity of Operable Petroleum Refineries by PAD District and State as of January 1, 1997**

PAD District and State	Number of Operable Refineries			Atmospheric Crude Oil Distillation Capacity					
				Barrels per Calendar Day			Barrels per Stream Day		
	Total	Operating	Idle <sup>a</sup>	Total	Operating	Idle	Total	Operating	Idle
<b>PAD District I</b>	<b>17</b>	<b>15</b>	<b>2</b>	<b>1,462,440</b>	<b>1,354,440</b>	<b>108,000</b>	<b>1,538,200</b>	<b>1,423,200</b>	<b>115,000</b>
Delaware	1	1	0	140,000	140,000	0	152,000	152,000	0
Georgia	2	1	1	33,540	5,540	28,000	42,000	10,000	32,000
New Jersey	6	5	1	645,000	565,000	80,000	670,000	587,000	83,000
Pennsylvania	6	6	0	575,700	575,700	0	602,000	602,000	0
Virginia	1	1	0	56,700	56,700	0	59,700	59,700	0
West Virginia	1	1	0	11,500	11,500	0	12,500	12,500	0
<b>PAD District II</b>	<b>29</b>	<b>29</b>	<b>0</b>	<b>3,444,365</b>	<b>3,444,365</b>	<b>0</b>	<b>3,624,500</b>	<b>3,624,500</b>	<b>0</b>
Illinois	6	6	0	947,715	947,715	0	997,000	997,000	0
Indiana	2	2	0	432,000	432,000	0	456,000	456,000	0
Kansas	3	3	0	284,350	284,350	0	298,000	298,000	0
Kentucky	2	2	0	224,800	224,800	0	232,400	232,400	0
Michigan	2	2	0	121,000	121,000	0	124,000	124,000	0
Minnesota	2	2	0	319,000	319,000	0	351,100	351,100	0
North Dakota	1	1	0	58,000	58,000	0	60,000	60,000	0
Ohio	4	4	0	508,500	508,500	0	523,000	523,000	0
Oklahoma	5	5	0	408,000	408,000	0	435,000	435,000	0
Tennessee	1	1	0	105,000	105,000	0	110,000	110,000	0
Wisconsin	1	1	0	36,000	36,000	0	38,000	38,000	0
<b>PAD District III</b>	<b>62</b>	<b>61</b>	<b>1</b>	<b>7,093,050</b>	<b>6,989,050</b>	<b>104,000</b>	<b>7,483,807</b>	<b>7,374,807</b>	<b>109,000</b>
Alabama	3	3	0	125,000	125,000	0	133,000	133,000	0
Arkansas	3	3	0	64,900	64,900	0	67,000	67,000	0
Louisiana	19	19	0	2,430,300	2,430,300	0	2,546,700	2,546,700	0
Mississippi	4	4	0	334,800	334,800	0	384,000	384,000	0
New Mexico	3	3	0	94,600	94,600	0	99,107	99,107	0
Texas	30	29	1	4,043,450	3,939,450	104,000	4,254,000	4,145,000	109,000
<b>PAD District IV</b>	<b>15</b>	<b>15</b>	<b>0</b>	<b>520,175</b>	<b>520,175</b>	<b>0</b>	<b>541,700</b>	<b>541,700</b>	<b>0</b>
Colorado	2	2	0	85,500	85,500	0	90,000	90,000	0
Montana	4	4	0	146,450	146,450	0	150,700	150,700	0
Utah	5	5	0	158,500	158,500	0	166,000	166,000	0
Wyoming	4	4	0	129,725	129,725	0	135,000	135,000	0
<b>PAD District V</b>	<b>41</b>	<b>39</b>	<b>2</b>	<b>2,931,755</b>	<b>2,859,855</b>	<b>71,900</b>	<b>3,098,754</b>	<b>3,019,000</b>	<b>79,754</b>
Alaska	6	6	0	283,350	283,350	0	300,500	300,500	0
California	24	23	1	1,911,305	1,851,305	60,000	2,018,900	1,951,900	67,000
Hawaii	2	2	0	147,500	147,500	0	152,000	152,000	0
Nevada	1	1	0	7,000	7,000	0	7,100	7,100	0
Oregon	1	1	0	0	0	0	0	0	0
Washington	7	6	1	582,600	570,700	11,900	620,254	607,500	12,754
<b>U.S. Total</b>	<b>164</b>	<b>159</b>	<b>5</b>	<b>15,451,785</b>	<b>15,167,885</b>	<b>283,900</b>	<b>16,286,961</b>	<b>15,983,207</b>	<b>303,754</b>
Puerto Rico	2	2	0	85,000	85,000	0	87,000	87,000	0
Virgin Islands	1	1	0	495,000	425,000	70,000	525,000	450,000	75,000

See footnotes at end of table.

**Table 36. Number and Capacity of Operable Petroleum Refineries by PAD District and State as of January 1, 1997 (Continued)**

PAD District and State	Downstream Charge Capacity (Barrels per Stream Day)							
	Vacuum Distillation	Thermal Cracking	Catalytic Cracking		Catalytic Hydro-cracking	Catalytic Reforming	Catalytic Hydro-treating	Fuels Solvent Deasphalting
			Fresh	Recycled				
<b>PAD District I</b>	<b>634,250</b>	<b>89,500</b>	<b>622,000</b>	<b>12,200</b>	<b>40,440</b>	<b>285,320</b>	<b>809,100</b>	<b>21,000</b>
Delaware	95,000	46,500	70,000	5,000	19,000	51,000	136,400	0
Georgia	0	0	0	0	0	0	0	0
New Jersey	257,000	24,000	310,000	5,000	17,000	83,000	309,500	21,000
Pennsylvania	242,250	0	215,000	200	0	136,220	328,800	0
Virginia	34,000	19,000	27,000	2,000	0	11,400	30,400	0
West Virginia	6,000	0	0	0	4,440	3,700	4,000	0
<b>PAD District II</b>	<b>1,454,850</b>	<b>420,500</b>	<b>1,259,100</b>	<b>33,800</b>	<b>150,500</b>	<b>891,500</b>	<b>2,467,100</b>	<b>16,400</b>
Illinois	401,950	126,000	362,500	3,000	67,500	284,200	643,700	0
Indiana	247,200	32,000	173,000	4,200	0	96,500	322,300	0
Kansas	115,000	55,800	85,500	500	0	65,000	240,200	0
Kentucky	92,000	59,200	100,000	0	0	44,500	217,800	0
Michigan	38,000	0	47,600	1,000	0	30,500	102,600	0
Minnesota	212,000	74,000	107,000	0	0	74,500	375,000	0
North Dakota	0	0	26,000	3,600	0	12,100	17,600	0
Ohio	178,200	42,500	182,000	16,500	78,000	161,600	209,100	12,000
Oklahoma	150,000	31,000	117,500	5,000	5,000	101,100	270,100	4,400
Tennessee	0	0	47,000	0	0	13,500	53,900	0
Wisconsin	20,500	0	11,000	0	0	8,000	14,800	0
<b>PAD District III</b>	<b>3,541,825</b>	<b>883,700</b>	<b>2,738,050</b>	<b>84,700</b>	<b>674,300</b>	<b>1,823,100</b>	<b>5,403,250</b>	<b>161,000</b>
Alabama	44,000	12,000	0	0	0	27,200	71,900	0
Arkansas	26,500	0	19,100	0	0	12,400	53,000	5,500
Louisiana	1,295,700	371,800	946,000	4,000	208,000	511,100	1,442,800	35,000
Mississippi	311,875	75,000	68,000	0	71,000	96,000	258,700	0
New Mexico	19,000	0	34,500	4,500	0	30,800	67,300	0
Texas	1,844,750	424,900	1,670,450	76,200	395,300	1,145,600	3,509,550	120,500
<b>PAD District IV</b>	<b>208,950</b>	<b>40,200</b>	<b>178,000</b>	<b>19,090</b>	<b>9,000</b>	<b>117,080</b>	<b>344,800</b>	<b>8,800</b>
Colorado	35,000	0	27,500	0	0	20,500	44,000	0
Montana	63,950	21,700	55,900	5,990	5,000	35,030	151,600	4,000
Utah	43,000	8,500	45,600	7,100	4,000	33,300	66,500	4,800
Wyoming	67,000	10,000	49,000	6,000	0	28,250	82,700	0
<b>PAD District V</b>	<b>1,508,800</b>	<b>615,700</b>	<b>797,700</b>	<b>5,000</b>	<b>513,950</b>	<b>609,500</b>	<b>2,016,500</b>	<b>68,000</b>
Alaska	26,000	0	0	0	9,050	12,000	12,000	0
California	1,106,100	520,700	652,000	2,000	429,900	444,000	1,692,000	50,000
Hawaii	71,300	15,000	22,000	0	18,000	13,000	14,500	0
Nevada	6,000	0	0	0	0	0	0	0
Oregon	15,000	0	0	0	0	0	0	0
Washington	284,400	80,000	123,700	3,000	57,000	140,500	298,000	18,000
<b>U.S. Total</b>	<b>7,348,675</b>	<b>2,049,600</b>	<b>5,594,850</b>	<b>154,790</b>	<b>1,388,190</b>	<b>3,726,500</b>	<b>11,040,750</b>	<b>275,200</b>
Puerto Rico	45,000	0	0	0	15,600	63,200	80,000	0
Virgin Islands	230,000	85,000	130,000	0	0	115,000	425,000	0

<sup>a</sup> Refineries where distillation units were completely idle but not permanently shutdown on January 1, 1997.

Source: Energy Information Administration (EIA), Form EIA-820, "Biennial Refinery Report."



**Table 37. Production Capacity of Operable Petroleum Refineries by PAD District and State as of January 1, 1997**  
(Barrels per Stream Day, Except Where Noted)

PAD District and State	Production Capacity							
	Alkylates	Aromatics	Asphalt and Road Oil	Isomers	Lubricants	Marketable Petroleum Coke	Hydrogen (MMcfd)	Sulfur (short tons/day)
<b>PAD District I</b>	<b>80,400</b>	<b>19,900</b>	<b>147,600</b>	<b>25,450</b>	<b>23,906</b>	<b>22,550</b>	<b>72</b>	<b>1,498</b>
Delaware	9,100	1,400	0	0	0	10,000	40	504
Georgia	0	0	27,000	0	0	0	0	0
New Jersey	34,500	7,500	106,600	12,500	12,000	7,500	20	621
Pennsylvania	33,300	11,000	14,000	12,950	6,850	0	11	300
Virginia	3,500	0	0	0	0	5,050	0	73
West Virginia	0	0	0	0	5,056	0	1	0
<b>PAD District II</b>	<b>265,500</b>	<b>48,000</b>	<b>292,750</b>	<b>196,270</b>	<b>30,900</b>	<b>85,723</b>	<b>374</b>	<b>4,387</b>
Illinois	95,500	8,000	69,250	12,650	7,600	30,050	85	1,707
Indiana	35,700	17,000	72,200	27,200	6,400	9,000	35	550
Kansas	24,700	3,000	0	35,000	0	13,423	6	351
Kentucky	13,000	6,000	30,000	16,250	8,500	0	20	400
Michigan	9,500	0	28,000	9,000	0	0	0	179
Minnesota	18,900	0	39,000	23,300	0	18,000	92	750
North Dakota	5,600	0	0	5,000	0	0	0	17
Ohio	27,300	14,000	28,500	28,500	200	8,200	101	204
Oklahoma	29,400	0	18,300	33,170	8,200	7,050	35	169
Tennessee	4,400	0	0	4,200	0	0	0	48
Wisconsin	1,500	0	7,500	2,000	0	0	0	12
<b>PAD District III</b>	<b>547,700</b>	<b>217,257</b>	<b>243,050</b>	<b>247,225</b>	<b>154,100</b>	<b>211,264</b>	<b>1,306</b>	<b>15,283</b>
Alabama	0	0	22,500	3,800	0	2,500	16	96
Arkansas	4,900	0	10,750	6,500	4,700	0	3	157
Louisiana	196,800	20,900	75,300	66,000	62,300	86,789	203	4,078
Mississippi	16,200	16,000	42,700	0	6,400	20,000	238	1,300
New Mexico	11,200	0	6,400	11,000	0	0	0	26
Texas	318,600	180,357	85,400	159,925	80,700	101,975	846	9,626
<b>PAD District IV</b>	<b>39,014</b>	<b>0</b>	<b>62,100</b>	<b>14,433</b>	<b>0</b>	<b>10,175</b>	<b>66</b>	<b>647</b>
Colorado	0	0	9,000	1,783	0	0	0	102
Montana	14,380	0	27,900	5,750	0	5,775	60	372
Utah	14,600	0	5,800	6,900	0	1,900	0	51
Wyoming	10,034	0	19,400	0	0	2,500	6	122
<b>PAD District V</b>	<b>187,300</b>	<b>2,500</b>	<b>126,363</b>	<b>94,000</b>	<b>34,900</b>	<b>128,197</b>	<b>1,234</b>	<b>4,651</b>
Alaska	0	2,500	2,500	4,000	0	0	13	15
California	153,000	0	78,413	75,700	34,900	106,697	1,110	4,228
Hawaii	5,000	0	16,000	3,200	0	0	21	34
Nevada	0	0	3,000	0	0	0	0	0
Oregon	0	0	11,250	0	0	0	0	0
Washington	29,300	0	15,200	11,100	0	21,500	90	374
<b>U.S. Total</b>	<b>1,119,914</b>	<b>287,657</b>	<b>871,863</b>	<b>577,378</b>	<b>243,806</b>	<b>457,909</b>	<b>3,052</b>	<b>26,466</b>
Puerto Rico	0	15,000	0	0	9,500	0	19	50
Virgin Islands	20,000	20,000	0	18,000	0	0	0	600

MMcfd = Million cubic feet per day.

Source: Energy Information Administration (EIA), Form EIA-820, "Biennial Refinery Report."

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**Table 38. Capacity of Operable Petroleum Refineries by State as of January 1, 1997**  
(Barrels per Stream Day, Except Where Noted)

State/Refiner/Location	Atmospheric Crude Oil Distillation Capacity				Downstream Charge Capacity				
	Barrels per Calendar Day		Barrels per Stream Day		Vacuum Distillation	Thermal Cracking			Other/ Gas Oil
	Operating	Idle	Operating	Idle		Delayed Coking	Fluid Coking	Visbreaking	
<b>Alabama</b>	<b>125,000</b>	<b>0</b>	<b>133,000</b>	<b>0</b>	<b>44,000</b>	<b>12,000</b>	<b>0</b>	<b>0</b>	<b>0</b>
Coastal Mobile Refining Co.									
Chickasaw	16,500	0	18,000	0	14,000	0	0	0	0
Hunt Refining Co.									
Tuscaloosa	33,500	0	35,000	0	15,000	12,000	0	0	0
Shell Chemical									
Saraland (Mobile) (Formerly LL & E Petroleum Marketing Inc.)	75,000	0	80,000	0	15,000	0	0	0	0
<b>Alaska</b>	<b>283,350</b>	<b>0</b>	<b>300,500</b>	<b>0</b>	<b>26,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Arco Alaska Inc.									
Kuparuk (Anchorage)	12,000	0	14,500	0	0	0	0	0	0
Prudhoe Bay	15,000	0	16,000	0	0	0	0	0	0
Mapco Petroleum Inc.									
North Pole	132,600	0	135,000	0	6,000	0	0	0	0
Petro Star Inc.									
North Pole	13,750	0	14,000	0	0	0	0	0	0
Valdez	38,000	0	41,000	0	0	0	0	0	0
Tesoro Petroleum Corp.									
Kenai	72,000	0	80,000	0	20,000	0	0	0	0
<b>Arkansas</b>	<b>64,900</b>	<b>0</b>	<b>67,000</b>	<b>0</b>	<b>26,500</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Berry Petroleum Co.									
Stephens	6,700	0	7,000	0	3,500	0	0	0	0
Cross Oil & Refining Co. Inc.									
Smackover	6,200	0	7,000	0	3,500	0	0	0	0
Lion Oil Co.									
El Dorado	52,000	0	53,000	0	19,500	0	0	0	0
<b>California</b>	<b>1,851,305</b>	<b>60,000</b>	<b>1,951,900</b>	<b>67,000</b>	<b>1,106,100</b>	<b>408,200</b>	<b>96,500</b>	<b>16,000</b>	<b>0</b>
Arco Products Co.									
Los Angeles	255,000	0	255,000	0	118,000	57,000	0	0	0
Chevron U.S.A. Inc.									
El Segundo	258,000	0	273,000	0	137,000	66,000	0	0	0
Richmond	225,000	0	240,000	0	115,000	0	0	0	0
Exxon Co. U.S.A.									
Benicia	128,000	0	132,000	0	67,000	0	27,500	0	0
Huntway Refining Co.									
Benicia	8,505	0	9,000	0	8,400	0	0	0	0
Wilmington	5,500	0	6,000	0	5,700	0	0	0	0
Kern Oil & Refining Co.									
Bakersfield	21,400	0	23,000	0	0	0	0	0	0
Lunday Thagard									
South Gate	8,100	0	8,500	0	7,000	0	0	0	0
Mobil Oil Corp.									
Torrance	130,000	0	143,000	0	55,000	53,000	0	0	0
Pacific Refining Co.									
Hercules	0	50,000	0	55,000	25,000	0	0	11,000	0
Paramount Petroleum Corp.									
Paramount	42,500	0	45,000	0	28,000	0	0	0	0
Petroleum Fuel & Terminal									
Long Beach	10,800	0	15,000	0	0	0	0	0	0
San Joaquin Refining Co. Inc.									
Bakersfield	14,300	10,000	15,000	12,000	12,000	0	0	5,000	0
Santa Maria Refining Co									
Santa Maria (Formerly Conoco Inc)	9,500	0	10,000	0	10,000	0	0	0	0

See footnotes at end of table.

**Table 38. Capacity of Operable Petroleum Refineries by State as of January 1, 1997 (Continued)**  
(Barrels per Stream Day, Except Where Noted)

Location	Downstream Charge Capacity (Continued)									
	Catalytic Cracking		Catalytic Hydrocracking	Catalytic Reforming		Heavy Gas Oil	Catalytic Hydrotreating			Fuel Solvents Deasphalting
	Fresh	Recycled		Low Pressure	High Pressure		Naphtha Reformer Feed	Distillate	Other/Residual	
<b>Alabama</b> .....	0	0	0	7,200	20,000	10,800	23,700	37,400	0	0
Chickasaw.....	0	0	0	0	0	0	0	0	0	0
Tuscaloosa.....	0	0	0	7,200	0	10,800	7,700	17,400	0	0
Saraland (Mobile).....	0	0	0	0	20,000	0	16,000	20,000	0	0
<b>Alaska</b> .....	0	0	9,050	12,000	0	0	12,000	0	0	0
Kuparuk (Anchorage).....	0	0	0	0	0	0	0	0	0	0
Prudhoe Bay .....	0	0	0	0	0	0	0	0	0	0
North Pole .....	0	0	0	0	0	0	0	0	0	0
North Pole .....	0	0	0	0	0	0	0	0	0	0
Valdez .....	0	0	0	0	0	0	0	0	0	0
Kenai.....	0	0	9,050	12,000	0	0	12,000	0	0	0
<b>Arkansas</b> .....	19,100	0	0	12,400	0	25,000	20,000	8,000	0	5,500
Stephens.....	0	0	0	0	0	0	0	0	0	0
Smackover .....	0	0	0	0	0	4,000	0	0	0	0
El Dorado .....	19,100	0	0	12,400	0	21,000	20,000	8,000	0	5,500
<b>California</b> .....	652,000	2,000	429,900	117,000	327,000	685,500	453,200	405,800	147,500	50,000
Los Angeles .....	92,000	0	43,000	0	64,000	85,000	39,000	17,000	15,700	0
El Segundo .....	65,000	0	49,000	0	42,000	72,000	75,000	78,000	0	0
Richmond.....	70,000	0	95,000	0	62,000	65,000	55,000	110,000	28,000	50,000
Benicia .....	69,000	0	32,000	0	34,000	37,000	68,000	25,000	24,000	0
Benicia .....	0	0	0	0	0	0	0	0	0	0
Wilmington .....	0	0	0	0	0	0	0	0	0	0
Bakersfield .....	0	0	0	0	2,800	0	5,000	7,300	0	0
South Gate.....	0	0	0	0	0	0	0	0	0	0
Torrance .....	93,000	0	27,000	0	18,000	80,400	20,000	30,000	0	0
Hercules.....	0	0	4,000	0	11,200	0	11,200	0	0	0
Paramount .....	0	0	0	0	9,000	12,000	10,000	8,000	0	0
Long Beach.....	0	0	0	0	0	0	0	0	0	0
Bakersfield .....	0	0	0	0	0	0	0	0	0	0
Santa Maria.....	0	0	0	0	0	0	0	0	0	0

See footnotes at end of table.



**Table 38. Capacity of Operable Petroleum Refineries by State as of January 1, 1997 (Continued)**  
(Barrels per Stream Day, Except Where Noted)

State/Refiner/Location	Atmospheric Crude Oil Distillation Capacity				Downstream Charge Capacity				
	Barrels per Calendar Day		Barrels per Stream Day		Vacuum Distillation	Thermal Cracking			
	Operating	Idle	Operating	Idle		Delayed Coking	Fluid Coking	Visbreaking	Other/ Gas Oil
Shell Oil Co.									
Martinez .....	155,200	0	163,000	0	109,200	20,000	23,000	0	0
Tenby Inc.									
Oxnard .....	4,000	0	5,000	0	0	0	0	0	0
Texaco Refining & Marketing Inc.									
Bakersfield .....	58,000	0	60,400	0	32,200	22,000	0	0	0
Wilmington (Los Angeles) .....	68,500	0	70,000	0	58,500	68,500	0	0	0
Tosco Refining Co.									
Martinez (Avon) .....	137,500	0	160,000	0	118,000	0	46,000	0	0
Ultramar Refining									
Wilmington .....	68,000	0	70,000	0	40,000	23,000	0	0	0
Unocal Corp.									
Arroyo Grande (Santa Maria)....	40,000	0	44,000	0	32,000	23,000	0	0	0
Rodeo (San Francisco) .....	76,000	0	77,000	0	42,100	23,700	0	0	0
Wilmington (Los Angeles) .....	127,500	0	128,000	0	76,000	52,000	0	0	0
Witco Corp.									
Oildale .....	0	0	0	0	10,000	0	0	0	0
<b>Colorado .....</b>	<b>85,500</b>	<b>0</b>	<b>90,000</b>	<b>0</b>	<b>35,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Colorado Refining Co.									
Commerce City .....	28,000	0	30,000	0	10,000	0	0	0	0
Conoco Inc.									
Commerce City .....	57,500	0	60,000	0	25,000	0	0	0	0
<b>Delaware .....</b>	<b>140,000</b>	<b>0</b>	<b>152,000</b>	<b>0</b>	<b>95,000</b>	<b>0</b>	<b>46,500</b>	<b>0</b>	<b>0</b>
Star Enterprise									
Delaware City .....	140,000	0	152,000	0	95,000	0	46,500	0	0
<b>Georgia .....</b>	<b>5,540</b>	<b>28,000</b>	<b>10,000</b>	<b>32,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Citgo Asphalt Refining Co.									
Savannah .....	0	28,000	0	32,000	0	0	0	0	0
Young Refining Corp.									
Douglasville .....	5,540	0	10,000	0	0	0	0	0	0
<b>Hawaii .....</b>	<b>147,500</b>	<b>0</b>	<b>152,000</b>	<b>0</b>	<b>71,300</b>	<b>0</b>	<b>0</b>	<b>15,000</b>	<b>0</b>
BHP Petroleum Americas Refining Inc.									
Ewa Beach .....	93,500	0	95,000	0	40,000	0	0	15,000	0
Chevron U.S.A. Inc.									
Honolulu .....	54,000	0	57,000	0	31,300	0	0	0	0
<b>Illinois .....</b>	<b>947,715</b>	<b>0</b>	<b>997,000</b>	<b>0</b>	<b>401,950</b>	<b>121,000</b>	<b>0</b>	<b>0</b>	<b>5,000</b>
Clark Refining & Marketing									
Blue Island .....	80,515	0	85,000	0	35,950	0	0	0	0
Hartford .....	64,000	0	67,000	0	30,000	15,500	0	0	0
Marathon Oil Co.									
Robinson .....	175,000	0	180,000	0	60,000	26,000	0	0	5,000
Mobil Oil Corp.									
Joliet .....	200,000	0	210,000	0	100,000	46,000	0	0	0
Shell Oil Co.									
Wood River .....	274,500	0	295,000	0	111,000	0	0	0	0
Uno-Ven Co.									
Lemont (Chicago) .....	153,700	0	160,000	0	65,000	33,500	0	0	0

See footnotes at end of table.

**Table 38. Capacity of Operable Petroleum Refineries by State as of January 1, 1997 (Continued)**  
(Barrels per Stream Day, Except Where Noted)

Location	Downstream Charge Capacity (Continued)									Fuel Solvents Deasphalting
	Catalytic Cracking		Catalytic Hydrocracking	Catalytic Reforming		Catalytic Hydrotreating				
	Fresh	Recycled		Low Pressure	High Pressure	Heavy Gas Oil	Naphtha Reformer Feed	Distillate	Other/ Residual	
Martinez .....	73,000	1,000	37,000	31,000	0	75,000	28,000	28,000	39,500	0
Oxnard .....	0	0	0	0	0	0	0	0	0	0
Bakersfield .....	0	0	19,900	14,500	0	16,600	13,000	0	9,400	0
Wilmington (Los Angeles).....	32,000	0	29,000	0	30,000	30,000	22,000	15,000	15,000	0
Martinez (Avon).....	70,000	1,000	35,000	23,000	20,000	70,000	25,000	35,000	0	0
Wilmington .....	36,000	0	0	14,500	0	90,000	25,000	0	0	0
Arroyo Grande (Santa Maria) .....	0	0	0	0	0	0	0	0	0	0
Rodeo (San Francisco) .....	0	0	34,000	0	34,000	0	23,000	10,000	14,500	0
Wilmington (Los Angeles).....	52,000	0	25,000	34,000	0	52,500	34,000	40,500	0	0
Oildale .....	0	0	0	0	0	0	0	2,000	1,400	0
Colorado .....	27,500	0	0	20,500	0	12,500	20,500	11,000	0	0
Commerce City .....	8,500	0	0	10,500	0	0	10,500	0	0	0
Commerce City .....	19,000	0	0	10,000	0	12,500	10,000	11,000	0	0
Delaware .....	70,000	5,000	19,000	41,000	10,000	0	77,400	59,000	0	0
Delaware City .....	70,000	5,000	19,000	41,000	10,000	0	77,400	59,000	0	0
Georgia .....	0	0	0	0	0	0	0	0	0	0
Savannah .....	0	0	0	0	0	0	0	0	0	0
Douglasville .....	0	0	0	0	0	0	0	0	0	0
Hawaii .....	22,000	0	18,000	13,000	0	0	11,000	0	3,500	0
Ewa Beach .....	0	0	18,000	13,000	0	0	11,000	0	0	0
Honolulu .....	22,000	0	0	0	0	0	0	0	3,500	0
Illinois .....	362,500	3,000	67,500	211,000	73,200	54,000	289,500	274,500	25,700	0
Blue Island .....	30,000	0	9,000	18,000	11,000	0	21,000	0	0	0
Hartford .....	27,000	0	0	0	15,000	0	13,500	14,700	0	0
Robinson .....	48,000	0	25,000	76,000	0	25,000	60,000	63,900	15,200	0
Joliet.....	98,000	0	0	42,000	0	0	76,000	78,000	0	0
Wood River.....	94,000	0	33,500	75,000	16,000	29,000	64,000	79,000	10,500	0
Lemont (Chicago).....	65,500	3,000	0	0	31,200	0	55,000	38,900	0	0

See footnotes at end of table.



**Table 38. Capacity of Operable Petroleum Refineries by State as of January 1, 1997 (Continued)**  
(Barrels per Stream Day, Except Where Noted)

State/Refiner/Location	Atmospheric Crude Oil Distillation Capacity				Downstream Charge Capacity				
	Barrels per Calendar Day		Barrels per Stream Day		Vacuum Distillation	Thermal Cracking			
	Operating	Idle	Operating	Idle		Delayed Coking	Fluid Coking	Visbreaking	Other/ Gas Oil
<b>Indiana</b>	<b>432,000</b>	<b>0</b>	<b>456,000</b>	<b>0</b>	<b>247,200</b>	<b>32,000</b>	<b>0</b>	<b>0</b>	<b>0</b>
Amoco Oil Co.									
Whiting	410,000	0	432,000	0	240,000	32,000	0	0	0
Countrymark Cooperative Inc.									
Mount Vernon	22,000	0	24,000	0	7,200	0	0	0	0
<b>Kansas</b>	<b>284,350</b>	<b>0</b>	<b>298,000</b>	<b>0</b>	<b>115,000</b>	<b>55,800</b>	<b>0</b>	<b>0</b>	<b>0</b>
Farmland Industries Inc.									
Coffeyville	112,000	0	115,000	0	50,000	17,500	0	0	0
National Cooperative Refinery Assoc.									
McPherson	73,600	0	78,000	0	26,000	22,000	0	0	0
Texaco Refining & Marketing Inc.									
El Dorado	98,750	0	105,000	0	39,000	16,300	0	0	0
<b>Kentucky</b>	<b>224,800</b>	<b>0</b>	<b>232,400</b>	<b>0</b>	<b>92,000</b>	<b>0</b>	<b>0</b>	<b>4,200</b>	<b>55,000</b>
Ashland Oil Inc.									
Catlettsburg	219,300	0	226,100	0	92,000	0	0	4,200	55,000
Somerset Refinery Inc.									
Somerset	5,500	0	6,300	0	0	0	0	0	0
<b>Louisiana</b>	<b>2,430,300</b>	<b>0</b>	<b>2,546,700</b>	<b>0</b>	<b>1,295,700</b>	<b>346,800</b>	<b>0</b>	<b>13,000</b>	<b>12,000</b>
BP Oil Corp.									
Belle Chasse (Alliance)	250,400	0	255,000	0	93,000	25,800	0	0	0
Basis Petroleum Inc.									
(Formerly Phibro Energy USA)									
Krotz Springs	60,000	0	61,500	0	0	0	0	0	0
Calcasieu Refining Co.									
Lake Charles	14,000	0	14,500	0	0	0	0	0	0
Calumet Lubricants Co. L.P.									
Cotton Valley	7,800	0	8,500	0	0	0	0	0	0
(Formerly Kerr-McGee Refg Corp.)									
Princeton	8,300	0	8,700	0	6,000	0	0	0	0
Canal Refining Co.									
Church Point	9,500	0	10,000	0	0	0	0	0	0
Citgo Petroleum Corp.									
Lake Charles	305,000	0	320,000	0	83,000	94,000	0	0	0
Conoco Inc.									
Westlake	226,000	0	236,000	0	115,500	65,000	0	0	12,000
Exxon Co. U.S.A.									
Baton Rouge	432,000	0	450,000	0	199,500	103,000	0	0	0
Gold Line Refining Ltd.									
Lake Charles	27,600	0	30,000	0	18,000	0	0	0	0
Marathon Oil Co.									
Garyville	255,000	0	263,000	0	125,000	0	0	0	0
Mobil Oil Corp.									
Chalmette	159,000	0	190,000	0	100,000	33,000	0	0	0
Murphy Oil U.S.A. Inc.									
Meraux	95,000	0	100,000	0	50,000	0	0	0	0
Pennzoil Producing Co.									
Shreveport	46,200	0	50,000	0	24,300	0	0	0	0
Placid Refining Co.									
Port Allen	48,500	0	49,500	0	20,000	0	0	0	0
Shell Chemical									
Saint Rose	38,000	0	40,000	0	24,000	0	0	0	0
(Formerly Saint Rose Refining Inc.)									
Shell Oil Co.									
Norco	218,000	0	225,000	0	78,000	26,000	0	0	0
Star Enterprise									
Convent	230,000	0	235,000	0	119,400	0	0	13,000	0

See footnotes at end of table.

**Table 38. Capacity of Operable Petroleum Refineries by State as of January 1, 1997 (Continued)**  
(Barrels per Stream Day, Except Where Noted)

Location	Downstream Charge Capacity (Continued)									
	Catalytic Cracking		Catalytic Hydrocracking	Catalytic Reforming		Catalytic Hydrotreating				Fuel Solvents Deasphalting
	Fresh	Recycled		Low Pressure	High Pressure	Heavy Gas Oil	Naphtha Reformer Feed	Distillate	Other/ Residual	
Indiana	173,000	4,200	0	6,500	90,000	98,300	125,000	99,000	0	0
Whiting	165,000	4,000	0	0	90,000	98,300	115,000	99,000	0	0
Mount Vernon	8,000	200	0	6,500	0	0	10,000	0	0	0
Kansas	85,500	500	0	28,500	36,500	48,000	89,800	84,000	18,400	0
Coffeyville	28,000	0	0	0	17,500	0	30,000	30,000	0	0
McPherson	21,000	500	0	21,000	0	0	21,300	24,000	18,400	0
El Dorado	36,500	0	0	7,500	19,000	48,000	38,500	30,000	0	0
Kentucky	100,000	0	0	43,500	1,000	40,000	58,800	80,000	39,000	0
Catlettsburg	100,000	0	0	43,500	0	40,000	57,500	80,000	39,000	0
Somerset	0	0	0	0	1,000	0	1,300	0	0	0
Louisiana	946,000	4,000	208,000	347,100	164,000	242,400	566,600	538,900	94,900	35,000
Belle Chasse (Alliance)	105,000	2,000	0	0	42,000	0	48,000	58,000	0	0
Krotz Springs	28,000	0	0	0	14,000	0	14,000	0	0	0
Lake Charles	0	0	0	0	0	0	0	0	0	0
Cotton Valley	0	0	0	0	0	0	3,600	0	0	0
Princeton	0	0	0	0	0	0	0	0	7,000	0
Church Point	0	0	0	2,100	0	0	0	0	0	0
Lake Charles	130,000	0	45,000	86,000	20,000	60,000	116,000	30,000	23,000	0
Westlake	51,000	0	28,000	47,000	0	0	50,000	128,500	13,000	0
Baton Rouge	215,000	0	24,000	70,000	0	0	123,000	89,000	50,700	0
Lake Charles	0	0	0	0	0	0	0	0	0	0
Garyville	95,000	0	0	45,000	0	71,000	50,000	45,000	0	30,000
Chalmette	68,000	0	20,000	19,000	28,000	43,000	45,000	27,000	0	0
Meraux	38,000	0	0	18,000	0	27,500	22,000	15,000	0	0
Shreveport	0	0	0	10,000	0	8,900	10,000	10,000	1,200	0
Port Allen	19,000	2,000	0	10,000	0	0	10,000	0	0	5,000
Saint Rose	0	0	0	0	0	0	0	0	0	0
Norco	110,000	0	39,000	40,000	20,000	0	34,000	40,000	0	0
Convent	87,000	0	52,000	0	40,000	32,000	41,000	96,400	0	0

See footnotes at end of table.



**Table 38. Capacity of Operable Petroleum Refineries by State as of January 1, 1997 (Continued)**  
(Barrels per Stream Day, Except Where Noted)

State/Refiner/Location	Atmospheric Crude Oil Distillation Capacity				Downstream Charge Capacity				
	Barrels per Calendar Day		Barrels per Stream Day		Vacuum Distillation	Thermal Cracking			
	Operating	Idle	Operating	Idle		Delayed Coking	Fluid Coking	Visbreaking	Other/ Gas Oil
Transamerican Refining Co. Good Hope (Norco).....	0	0	0	0	240,000	0	0	0	0
<b>Michigan</b> .....	<b>121,000</b>	<b>0</b>	<b>124,000</b>	<b>0</b>	<b>38,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Marathon Oil Co. Detroit .....	70,000	0	72,000	0	38,000	0	0	0	0
Total Petroleum Inc. Alma.....	51,000	0	52,000	0	0	0	0	0	0
<b>Minnesota</b> .....	<b>319,000</b>	<b>0</b>	<b>351,100</b>	<b>0</b>	<b>212,000</b>	<b>74,000</b>	<b>0</b>	<b>0</b>	<b>0</b>
Ashland Oil Inc. St. Paul .....	69,000	0	71,100	0	32,000	0	0	0	0
Koch Refining Co. St. Paul (Pine Bend) .....	250,000	0	280,000	0	180,000	74,000	0	0	0
<b>Mississippi</b> .....	<b>334,800</b>	<b>0</b>	<b>384,000</b>	<b>0</b>	<b>311,875</b>	<b>75,000</b>	<b>0</b>	<b>0</b>	<b>0</b>
Chevron U.S.A. Inc. Pascagoula .....	295,000	0	340,000	0	286,000	75,000	0	0	0
Ergon Refining, Inc. Vicksburg .....	23,000	0	25,000	0	19,000	0	0	0	0
Southland Oil Co. Lumberton.....	5,800	0	6,500	0	0	0	0	0	0
Sandersville .....	11,000	0	12,500	0	6,875	0	0	0	0
<b>Montana</b> .....	<b>146,450</b>	<b>0</b>	<b>150,700</b>	<b>0</b>	<b>63,950</b>	<b>14,000</b>	<b>7,700</b>	<b>0</b>	<b>0</b>
Cenex Laurel.....	41,450	0	42,500	0	12,000	0	0	0	0
Conoco Inc. Billings.....	52,000	0	53,000	0	26,500	14,000	0	0	0
Exxon Co. U.S.A. Billings.....	46,000	0	48,000	0	22,000	0	7,700	0	0
Montana Refining Co. Great Falls .....	7,000	0	7,200	0	3,450	0	0	0	0
<b>Nevada</b> .....	<b>7,000</b>	<b>0</b>	<b>7,100</b>	<b>0</b>	<b>6,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Petro Source Refining Partners Eagle Springs.....	7,000	0	7,100	0	6,000	0	0	0	0
<b>New Jersey</b> .....	<b>565,000</b>	<b>80,000</b>	<b>587,000</b>	<b>83,000</b>	<b>257,000</b>	<b>24,000</b>	<b>0</b>	<b>0</b>	<b>0</b>
Amerada Hess Corp. Port Reading (Sewaren) .....	0	0	0	0	0	0	0	0	0
Chevron U.S.A. Inc. Perth Amboy .....	0	80,000	0	83,000	47,000	0	0	0	0
Citgo Asphalt Refining Co. Paulsboro.....	40,000	0	44,000	0	40,000	0	0	0	0
Coastal Eagle Point Oil Co. Westville.....	133,000	0	140,000	0	50,000	0	0	0	0
Mobil Oil Corp. Paulsboro.....	152,000	0	153,000	0	54,000	24,000	0	0	0
Tosco Refining Co. (Formerly Bayway Refining Co.) Linden (Bayway) .....	240,000	0	250,000	0	66,000	0	0	0	0
<b>New Mexico</b> .....	<b>94,600</b>	<b>0</b>	<b>99,107</b>	<b>0</b>	<b>19,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Giant Industries Inc. Bloomfield .....	16,800	0	18,107	0	0	0	0	0	0
(Formerly Bloomfield Refining Co.) Gallup.....	20,800	0	21,000	0	0	0	0	0	0

See footnotes at end of table.

**Table 38. Capacity of Operable Petroleum Refineries by State as of January 1, 1997 (Continued)**  
(Barrels per Stream Day, Except Where Noted)

Location	Downstream Charge Capacity (Continued)									
	Catalytic Cracking		Catalytic Hydrocracking	Catalytic Reforming		Catalytic Hydrotreating				Fuel Solvents Deasphalting
	Fresh	Recycled		Low Pressure	High Pressure	Heavy Gas Oil	Naphtha Reformer Feed	Distillate	Other/Residual	
Good Hope (Norco).....	0	0	0	0	0	0	0	0	0	0
<b>Michigan</b> .....	<b>47,600</b>	<b>1,000</b>	<b>0</b>	<b>30,500</b>	<b>0</b>	<b>15,000</b>	<b>42,000</b>	<b>45,600</b>	<b>0</b>	<b>0</b>
Detroit.....	27,500	1,000	0	15,000	0	11,200	17,000	21,800	0	0
Alma.....	20,100	0	0	15,500	0	3,800	25,000	23,800	0	0
<b>Minnesota</b> .....	<b>107,000</b>	<b>0</b>	<b>0</b>	<b>36,000</b>	<b>38,500</b>	<b>123,000</b>	<b>113,500</b>	<b>136,200</b>	<b>2,300</b>	<b>0</b>
St. Paul.....	23,000	0	0	0	23,500	23,000	23,500	27,200	2,300	0
St. Paul (Pine Bend).....	84,000	0	0	36,000	15,000	100,000	90,000	109,000	0	0
<b>Mississippi</b> .....	<b>68,000</b>	<b>0</b>	<b>71,000</b>	<b>62,000</b>	<b>34,000</b>	<b>36,000</b>	<b>54,800</b>	<b>65,500</b>	<b>102,400</b>	<b>0</b>
Pascagoula.....	68,000	0	71,000	62,000	34,000	36,000	54,800	65,500	96,000	0
Vicksburg.....	0	0	0	0	0	0	0	0	6,400	0
Lumberton.....	0	0	0	0	0	0	0	0	0	0
Sandersville.....	0	0	0	0	0	0	0	0	0	0
<b>Montana</b> .....	<b>55,900</b>	<b>5,990</b>	<b>5,000</b>	<b>12,000</b>	<b>23,030</b>	<b>39,000</b>	<b>44,600</b>	<b>62,000</b>	<b>6,000</b>	<b>4,000</b>
Laurel.....	13,500	1,500	0	12,000	0	16,000	18,000	15,000	0	4,000
Billings.....	19,000	990	0	0	12,000	20,000	10,000	24,000	0	0
Billings.....	21,000	3,500	5,000	0	10,000	0	15,500	20,000	6,000	0
Great Falls.....	2,400	0	0	0	1,030	3,000	1,100	3,000	0	0
<b>Nevada</b> .....	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Eagle Springs.....	0	0	0	0	0	0	0	0	0	0
<b>New Jersey</b> .....	<b>310,000</b>	<b>5,000</b>	<b>17,000</b>	<b>57,000</b>	<b>26,000</b>	<b>50,000</b>	<b>86,000</b>	<b>143,000</b>	<b>30,500</b>	<b>21,000</b>
Port Reading (Sewaren).....	60,000	5,000	0	0	0	0	0	0	0	0
Perth Amboy.....	0	0	0	0	0	0	0	0	0	0
Paulsboro.....	0	0	0	0	0	0	0	0	0	0
Westville.....	55,000	0	17,000	28,000	0	0	30,000	17,000	10,000	0
Paulsboro.....	55,000	0	0	0	26,000	0	26,000	46,000	20,500	0
Linden (Bayway).....	140,000	0	0	29,000	0	50,000	30,000	80,000	0	21,000
<b>New Mexico</b> .....	<b>34,500</b>	<b>4,500</b>	<b>0</b>	<b>15,000</b>	<b>15,800</b>	<b>0</b>	<b>34,800</b>	<b>32,500</b>	<b>0</b>	<b>0</b>
Bloomfield.....	6,000	500	0	0	4,000	0	4,000	3,000	0	0
Gallup.....	8,500	3,000	0	0	6,800	0	6,800	3,000	0	0

See footnotes at end of table.



**Table 38. Capacity of Operable Petroleum Refineries by State as of January 1, 1997 (Continued)**  
(Barrels per Stream Day, Except Where Noted)

State/Refiner/Location	Atmospheric Crude Oil Distillation Capacity				Downstream Charge Capacity				
	Barrels per Calendar Day		Barrels per Stream Day		Vacuum Distillation	Thermal Cracking			
	Operating	Idle	Operating	Idle		Delayed Coking	Fluid Coking	Visbreaking	Other/ Gas Oil
Navajo Refining Co. Artesia .....	57,000	0	60,000	0	19,000	0	0	0	0
<b>North Dakota</b> .....	<b>58,000</b>	<b>0</b>	<b>60,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Amoco Oil Co. Mandan .....	58,000	0	60,000	0	0	0	0	0	0
<b>Ohio</b> .....	<b>508,500</b>	<b>0</b>	<b>523,000</b>	<b>0</b>	<b>178,200</b>	<b>42,500</b>	<b>0</b>	<b>0</b>	<b>0</b>
Ashland Oil Inc. Canton .....	66,000	0	68,000	0	33,000	0	0	0	0
BP Oil Corp. Lima .....	161,500	0	165,000	0	52,000	21,500	0	0	0
Toledo .....	152,000	0	155,000	0	65,000	21,000	0	0	0
Sun Co Inc. Toledo .....	129,000	0	135,000	0	28,200	0	0	0	0
<b>Oklahoma</b> .....	<b>408,000</b>	<b>0</b>	<b>435,000</b>	<b>0</b>	<b>150,000</b>	<b>31,000</b>	<b>0</b>	<b>0</b>	<b>0</b>
Conoco Inc. Ponca City .....	155,000	0	168,000	0	48,000	22,500	0	0	0
Sinclair Oil Corp. Tulsa .....	57,000	0	59,000	0	27,000	0	0	0	0
Sun Co Inc. Tulsa .....	85,000	0	90,000	0	29,000	8,500	0	0	0
Total Petroleum Inc. Ardmore .....	68,000	0	73,000	0	32,000	0	0	0	0
Wynnewood Refining Co. (Formerly Kerr-McGee Refining Corp.) Wynnewood .....	43,000	0	45,000	0	14,000	0	0	0	0
<b>Oregon</b> .....	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>15,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Chevron U.S.A. Inc. Portland (Willbridge) .....	0	0	0	0	15,000	0	0	0	0
<b>Pennsylvania</b> .....	<b>575,700</b>	<b>0</b>	<b>602,000</b>	<b>0</b>	<b>242,250</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Astor Corp/Petrowax Refining Division (Formerly Petrowax Pennsylvania Inc.) Farmer's Valley (Smethport) .....	0	0	0	0	3,750	0	0	0	0
Pennzoil Producing Co. Rouseville .....	15,700	0	16,500	0	6,500	0	0	0	0
Sun Co Inc. Marcus Hook .....	175,000	0	185,000	0	46,000	0	0	0	0
Sun Refining & Marketing Philadelphia .....	315,000	0	322,000	0	160,000	0	0	0	0
United Refining Co. Warren .....	60,000	0	68,000	0	26,000	0	0	0	0
Witco Corp. Bradford .....	10,000	0	10,500	0	0	0	0	0	0
<b>Tennessee</b> .....	<b>105,000</b>	<b>0</b>	<b>110,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Mapco Petroleum Inc. Memphis .....	105,000	0	110,000	0	0	0	0	0	0
<b>Texas</b> .....	<b>3,939,450</b>	<b>104,000</b>	<b>4,145,000</b>	<b>109,000</b>	<b>1,844,750</b>	<b>364,900</b>	<b>41,000</b>	<b>19,000</b>	<b>0</b>
Age Refining & Marketing San Antonio .....	6,500	0	10,000	0	0	0	0	0	0
Amoco Oil Co. Texas City .....	433,000	0	460,000	0	240,000	36,000	0	0	0

See footnotes at end of table.

**Table 38. Capacity of Operable Petroleum Refineries by State as of January 1, 1997 (Continued)**  
(Barrels per Stream Day, Except Where Noted)

Location	Downstream Charge Capacity (Continued)									Fuel Solvents Deasphalting
	Catalytic Cracking		Catalytic Hydrocracking	Catalytic Reforming		Catalytic Hydrotreating				
	Fresh	Recycled		Low Pressure	High Pressure	Heavy Gas Oil	Naphtha Reformer Feed	Distillate	Other/ Residual	
Artesia .....	20,000	1,000	0	15,000	5,000	0	24,000	26,500	0	0
North Dakota .....	26,000	3,600	0	0	12,100	0	17,600	0	0	0
Mandan.....	26,000	3,600	0	0	12,100	0	17,600	0	0	0
Ohio .....	182,000	16,500	78,000	20,000	141,600	23,000	170,000	9,600	6,500	12,000
Canton .....	25,000	0	0	20,000	0	23,000	20,000	9,600	6,500	0
Lima.....	37,000	0	23,000	0	54,000	0	60,000	0	0	0
Toledo.....	60,000	16,500	27,000	0	42,000	0	40,000	0	0	0
Toledo .....	60,000	0	28,000	0	45,600	0	50,000	0	0	12,000
Oklahoma .....	117,500	5,000	5,000	29,500	71,600	49,000	122,600	88,000	10,500	4,400
Ponca City .....	55,000	0	0	0	42,600	21,000	42,600	42,500	0	0
Tulsa .....	19,000	5,000	0	0	12,000	0	20,000	17,500	0	0
Tulsa .....	0	0	0	0	17,000	0	25,000	0	10,500	0
Ardmore.....	25,500	0	0	17,000	0	28,000	24,000	28,000	0	0
Wynnewood .....	18,000	0	5,000	12,500	0	0	11,000	0	0	4,400
Oregon.....	0	0	0	0	0	0	0	0	0	0
Portland (Willbridge) .....	0	0	0	0	0	0	0	0	0	0
Pennsylvania.....	215,000	200	0	5,820	130,400	24,000	164,800	132,000	8,000	0
Farmer's Valley (Smethport) .....	0	0	0	0	0	0	0	0	0	0
Rouseville .....	0	0	0	5,820	0	0	6,500	0	8,000	0
Marcus Hook .....	87,000	0	0	0	27,600	0	45,000	30,000	0	0
Philadelphia .....	105,000	0	0	0	86,000	24,000	88,000	79,000	0	0
Warren .....	23,000	200	0	0	15,000	0	22,000	23,000	0	0
Bradford.....	0	0	0	0	1,800	0	3,300	0	0	0
Tennessee .....	47,000	0	0	13,500	0	0	19,000	34,900	0	0
Memphis .....	47,000	0	0	13,500	0	0	19,000	34,900	0	0
Texas.....	1,670,450	76,200	395,300	841,900	303,700	600,800	1,207,400	1,295,150	406,200	120,500
San Antonio .....	0	0	0	0	1,200	0	0	0	0	0
Texas City .....	207,000	43,000	120,000	60,000	80,000	100,000	146,000	135,000	0	0

See footnotes at end of table.



**Table 38. Capacity of Operable Petroleum Refineries by State as of January 1, 1997 (Continued)**  
(Barrels per Stream Day, Except Where Noted)

State/Refiner/Location	Atmospheric Crude Oil Distillation Capacity				Downstream Charge Capacity				
	Barrels per Calendar Day		Barrels per Stream Day		Vacuum Distillation	Thermal Cracking			
	Operating	Idle	Operating	Idle		Delayed Coking	Fluid Coking	Visbreaking	Other/ Gas Oil
Basis Petroleum Inc. (Formerly Phibro Energy USA)									
Houston .....	71,000	0	75,000	0	39,000	0	0	0	0
Texas City .....	148,600	0	155,000	0	115,000	0	0	0	0
Chevron U.S.A. Inc.									
El Paso.....	90,000	0	97,500	0	40,000	0	0	0	0
Citgo Refining & Chemical Inc.									
Corpus Christi .....	133,000	0	140,000	0	67,000	36,000	0	0	0
Clark Refining and Marketing									
Port Arthur.....	203,500	0	212,000	0	100,000	37,500	0	0	0
(Formerly Chevron U.S.A. Inc.)									
Coastal Refining & Marketing Inc.									
Corpus Christi .....	95,000	0	100,000	0	56,000	18,000	0	10,000	0
Crown Central Petroleum Corp.									
Pasadena.....	100,000	0	103,000	0	38,000	12,500	0	0	0
Deer Park Refg Ltd Partnership									
Deer Park.....	255,700	0	262,000	0	134,500	62,000	0	0	0
Diamond Shamrock Refining & Marketing Co.									
Sunray (McKee) .....	140,000	0	142,000	0	47,000	0	0	0	0
Three Rivers .....	83,000	0	85,000	0	30,000	0	0	0	0
Exxon Co. U.S.A.									
Baytown .....	411,000	0	434,000	0	208,000	0	41,000	0	0
Fina Oil & Chemical Co.									
Big Spring .....	55,000	0	60,000	0	24,000	0	0	0	0
Port Arthur.....	178,500	0	183,500	0	52,000	0	0	0	0
Howell Hydrocarbons & Chemical Inc.									
Channelview .....	1,400	0	1,700	0	0	0	0	0	0
Koch Refining Co.									
Corpus Christi * .....	264,000	0	280,000	0	102,000	14,000	0	0	0
La Gloria Oil & Gas Co.									
Tyler .....	55,000	0	55,500	0	14,000	6,500	0	0	0
Lyondell Citgo Refining Co. Ltd.									
Houston .....	178,000	77,000	185,000	80,000	146,000	42,000	0	0	0
Marathon Oil Co.									
Texas City .....	70,000	0	73,000	0	0	0	0	0	0
Mobil Oil Corp.									
Beaumont .....	310,700	0	317,000	0	135,000	45,400	0	0	0
Neste Trifinery Petro Serve									
Corpus Christi .....	0	27,000	0	29,000	25,000	0	0	9,000	0
Petrolite Corp.									
Kilgore.....	600	0	800	0	750	0	0	0	0
Phillips 66 Co.									
Borger .....	120,000	0	130,000	0	0	0	0	0	0
Sweeny .....	200,000	0	213,000	0	74,000	0	0	0	0
Pride Refining Inc.									
Abilene.....	42,750	0	45,000	0	13,500	0	0	0	0
Shell Oil Co.									
Odessa.....	28,300	0	29,000	0	0	0	0	0	0
South Hampton Refining Co.									
Silsbee .....	0	0	0	0	0	0	0	0	0
Star Enterprise									
Port Arthur/Neches.....	235,000	0	266,000	0	112,000	55,000	0	0	0
Valero Refining Co.									
Corpus Christi .....	29,900	0	30,000	0	32,000	0	0	0	0
<b>Utah.....</b>	<b>158,500</b>	<b>0</b>	<b>166,000</b>	<b>0</b>	<b>43,000</b>	<b>8,500</b>	<b>0</b>	<b>0</b>	<b>0</b>
Amoco Oil Co.									
Salt Lake City .....	52,000	0	53,000	0	0	0	0	0	0
Big West Oil Co.									
North Salt Lake .....	24,000	0	25,000	0	5,000	0	0	0	0

See footnotes at end of table.

**Table 38. Capacity of Operable Petroleum Refineries by State as of January 1, 1997 (Continued)**  
(Barrels per Stream Day, Except Where Noted)

Location	Downstream Charge Capacity (Continued)									
	Catalytic Cracking		Catalytic Hydrocracking	Catalytic Reforming		Catalytic Hydrotreating				Fuel Solvents Deasphalting
	Fresh	Recycled		Low Pressure	High Pressure	Heavy Gas Oil	Naphtha Reformer Feed	Distillate	Other/Residual	
Houston.....	61,000	0	0	0	0	0	0	31,500	0	0
Texas City.....	45,000	0	0	12,000	11,200	0	29,500	66,000	65,000	30,000
El Paso.....	30,000	0	0	25,000	0	0	25,000	21,500	0	0
Corpus Christi .....	79,500	0	0	51,500	0	65,000	58,500	41,700	0	0
Port Arthur .....	65,000	0	0	50,000	0	65,000	50,000	90,000	23,000	0
Corpus Christi .....	20,000	0	10,500	0	29,000	21,000	33,000	24,000	0	0
Pasadena .....	56,000	0	0	23,000	0	0	28,000	7,000	16,000	0
Deer Park.....	67,000	5,000	65,000	45,000	24,500	83,000	65,000	70,000	12,000	0
Sunray (McKee) .....	47,000	0	26,000	42,000	0	0	35,000	30,000	0	16,000
Three Rivers.....	21,000	0	26,000	30,000	0	12,000	20,000	5,000	0	7,000
Baytown .....	195,000	5,000	27,000	123,000	0	110,000	148,000	197,000	60,100	38,000
Big Spring.....	25,000	0	0	21,000	0	6,000	25,500	22,750	2,500	10,000
Port Arthur .....	62,300	0	0	35,000	0	25,800	44,200	52,000	0	19,500
Channelview.....	0	0	0	0	0	0	0	0	0	0
Corpus Christi .....	99,000	0	15,000	64,500	22,000	18,000	113,000	62,000	0	0
Tyler .....	20,250	800	0	13,000	5,500	0	22,000	14,000	0	0
Houston.....	92,000	0	0	25,000	46,000	95,000	78,000	123,000	6,600	0
Texas City.....	40,000	0	0	0	10,800	0	0	0	0	0
Beaumont.....	105,000	0	50,000	132,000	0	0	110,000	95,000	0	0
Corpus Christi .....	0	0	0	0	0	0	0	0	0	0
Kilgore .....	0	0	0	0	0	0	0	0	0	0
Borger .....	60,000	10,400	0	0	26,000	0	26,500	40,000	50,000	0
Sweeny .....	99,400	12,000	0	0	37,500	0	55,700	51,000	82,500	0
Abilene .....	0	0	0	7,500	0	0	7,500	12,000	0	0
Odessa.....	10,000	0	0	0	10,000	0	13,500	0	0	0
Silsbee .....	0	0	0	1,400	0	0	3,500	500	500	0
Port Arthur/Neches.....	90,000	0	19,800	45,000	0	0	43,000	104,200	18,000	0
Corpus Christi .....	74,000	0	36,000	36,000	0	0	27,000	0	70,000	0
<b>Utah .....</b>	<b>45,600</b>	<b>7,100</b>	<b>4,000</b>	<b>0</b>	<b>33,300</b>	<b>0</b>	<b>37,800</b>	<b>22,000</b>	<b>6,700</b>	<b>4,800</b>
Salt Lake City .....	18,600	4,000	0	0	10,500	0	10,500	0	0	0
North Salt Lake .....	5,000	500	0	0	5,500	0	7,000	7,000	0	0

See footnotes at end of table.



**Table 38. Capacity of Operable Petroleum Refineries by State as of January 1, 1997 (Continued)**  
(Barrels per Stream Day, Except Where Noted)

State/Refiner/Location	Atmospheric Crude Oil Distillation Capacity				Downstream Charge Capacity				
	Barrels per Calendar Day		Barrels per Stream Day		Vacuum Distillation	Thermal Cracking			Other/ Gas Oil
	Operating	Idle	Operating	Idle		Delayed Coking	Fluid Coking	Visbreaking	
Chevron U.S.A. Inc. Salt Lake City.....	45,000	0	49,000	0	27,500	8,500	0	0	0
Crysen Refining Inc. Woods Cross .....	E12,500	E0	E13,000	E0	E5,000	E0	E0	E0	E0
Phillips 66 Co. Woods Cross .....	25,000	0	26,000	0	5,500	0	0	0	0
<b>Virginia .....</b>	<b>56,700</b>	<b>0</b>	<b>59,700</b>	<b>0</b>	<b>34,000</b>	<b>19,000</b>	<b>0</b>	<b>0</b>	<b>0</b>
Amoco Oil Co. Yorktown .....	56,700	0	59,700	0	34,000	19,000	0	0	0
<b>Washington .....</b>	<b>570,700</b>	<b>11,900</b>	<b>607,500</b>	<b>12,754</b>	<b>284,400</b>	<b>80,000</b>	<b>0</b>	<b>0</b>	<b>0</b>
Arco Products Co. Ferndale (Cherry Point) .....	202,000	0	213,000	0	107,000	55,000	0	0	0
Chevron U.S.A. Inc. Richmond Beach.....	0	0	0	0	6,200	0	0	0	0
Shell Oil Co. Anacortes.....	108,200	0	112,000	0	47,000	0	0	0	0
Sound Refining Inc. Tacoma .....	0	11,900	0	12,754	6,000	0	0	0	0
Texaco Refining & Marketing Inc. Anacortes (Puget Sound).....	132,000	0	147,000	0	60,000	25,000	0	0	0
Tosco Refining Co. (Formerly Tosco Northwest Co.) Ferndale.....	88,500	0	92,000	0	32,500	0	0	0	0
U.S. Oil & Refining Co. Tacoma .....	40,000	0	43,500	0	25,700	0	0	0	0
<b>West Virginia .....</b>	<b>11,500</b>	<b>0</b>	<b>12,500</b>	<b>0</b>	<b>6,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Quaker State Corp. Newell (Congo) .....	11,500	0	12,500	0	6,000	0	0	0	0
<b>Wisconsin .....</b>	<b>36,000</b>	<b>0</b>	<b>38,000</b>	<b>0</b>	<b>20,500</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Murphy Oil U.S.A. Inc. Superior .....	36,000	0	38,000	0	20,500	0	0	0	0
<b>Wyoming .....</b>	<b>129,725</b>	<b>0</b>	<b>135,000</b>	<b>0</b>	<b>67,000</b>	<b>10,000</b>	<b>0</b>	<b>0</b>	<b>0</b>
Frontier Refining Cheyenne .....	38,670	0	41,000	0	23,500	10,000	0	0	0
Little America Refining Co. Evansville (Casper) .....	24,500	0	25,500	0	12,000	0	0	0	0
Sinclair Oil Corp Sinclair .....	54,000	0	55,000	0	30,000	0	0	0	0
Wyoming Refining Co. Newcastle .....	12,555	0	13,500	0	1,500	0	0	0	0
<b>U.S. Total .....</b>	<b>15,167,885</b>	<b>283,900</b>	<b>15,983,207</b>	<b>303,754</b>	<b>7,348,675</b>	<b>1,718,700</b>	<b>191,700</b>	<b>67,200</b>	<b>72,000</b>

See footnotes at end of table.

**Table 38. Capacity of Operable Petroleum Refineries by State as of January 1, 1997 (Continued)**  
(Barrels per Stream Day, Except Where Noted)

Location	Downstream Charge Capacity (Continued)									
	Catalytic Cracking		Catalytic Hydrocracking	Catalytic Reforming		Heavy Gas Oil	Catalytic Hydrotreating			Fuel Solvents Deasphalting
	Fresh	Recycled		Low Pressure	High Pressure		Naptha Reformer Feed	Distillate	Other/Residual	
Salt Lake City .....	14,000	0	0	0	8,000	0	8,300	13,300	6,700	0
Woods Cross .....	E <sub>0</sub>	E <sub>0</sub>	E <sub>4,000</sub>	E <sub>0</sub>	E <sub>2,100</sub>	E <sub>0</sub>	E <sub>0</sub>	E <sub>0</sub>	E <sub>0</sub>	E <sub>0</sub>
Woods Cross .....	8,000	2,600	0	0	7,200	0	12,000	1,700	0	4,800
<b>Virginia .....</b>	<b>27,000</b>	<b>2,000</b>	<b>0</b>	<b>11,400</b>	<b>0</b>	<b>0</b>	<b>11,700</b>	<b>18,700</b>	<b>0</b>	<b>0</b>
Yorktown .....	27,000	2,000	0	11,400	0	0	11,700	18,700	0	0
<b>Washington .....</b>	<b>123,700</b>	<b>3,000</b>	<b>57,000</b>	<b>103,300</b>	<b>37,200</b>	<b>7,600</b>	<b>150,300</b>	<b>126,400</b>	<b>13,700</b>	<b>18,000</b>
Ferndale (Cherry Point) .....	0	0	57,000	62,000	0	0	51,000	24,000	0	0
Richmond Beach .....	0	0	0	0	0	0	0	0	0	0
Anacortes .....	43,700	3,000	0	26,000	0	7,600	34,000	29,300	0	18,000
Tacoma .....	0	0	0	0	0	0	0	0	0	0
Anacortes (Puget Sound) .....	54,000	0	0	0	31,000	0	42,000	42,000	0	0
Ferndale .....	26,000	0	0	15,300	0	0	15,800	25,300	13,700	0
Tacoma .....	0	0	0	0	6,200	0	7,500	5,800	0	0
<b>West Virginia .....</b>	<b>0</b>	<b>0</b>	<b>4,440</b>	<b>3,700</b>	<b>0</b>	<b>0</b>	<b>4,000</b>	<b>0</b>	<b>0</b>	<b>0</b>
Newell (Congo) .....	0	0	4,440	3,700	0	0	4,000	0	0	0
<b>Wisconsin .....</b>	<b>11,000</b>	<b>0</b>	<b>0</b>	<b>8,000</b>	<b>0</b>	<b>0</b>	<b>9,000</b>	<b>5,800</b>	<b>0</b>	<b>0</b>
Superior .....	11,000	0	0	8,000	0	0	9,000	5,800	0	0
<b>Wyoming .....</b>	<b>49,000</b>	<b>6,000</b>	<b>0</b>	<b>7,000</b>	<b>21,250</b>	<b>0</b>	<b>27,200</b>	<b>44,500</b>	<b>11,000</b>	<b>0</b>
Cheyenne .....	12,000	0	0	7,000	0	0	7,500	16,500	0	0
Evansville (Casper) .....	10,500	500	0	0	6,000	0	7,200	8,000	0	0
Sinclair .....	21,000	1,000	0	0	12,500	0	12,500	16,000	11,000	0
Newcastle .....	5,500	4,500	0	0	2,750	0	0	4,000	0	0
<b>U.S. Total .....</b>	<b>5,594,850</b>	<b>154,790</b>	<b>1,388,190</b>	<b>2,116,320</b>	<b>1,610,180</b>	<b>2,183,900</b>	<b>4,064,600</b>	<b>3,859,450</b>	<b>932,800</b>	<b>275,200</b>

See footnotes at end of table.



**Table 38. Capacity of Operable Petroleum Refineries by State as of January 1, 1997 (Continued)**  
(Barrels per Stream Day, Except Where Noted)

State/Refiner/Location	Atmospheric Crude Oil Distillation Capacity				Downstream Charge Capacity				
	Barrels per Calendar Day		Barrels per Stream Day		Vacuum Distillation	Thermal Cracking			Other/ Gas Oil
	Operating	Idle	Operating	Idle		Delayed Coking	Fluid Coking	Visbreaking	
<b>Puerto Rico</b> .....	85,000	0	87,000	0	45,000	0	0	0	0
Phillips Puerto Rico Core Inc.									
Guayama .....	0	0	0	0	0	0	0	0	0
Sun Co Inc.									
Yabucoa .....	85,000	0	87,000	0	45,000	0	0	0	0
<b>Virgin Islands</b> .....	425,000	70,000	450,000	75,000	230,000	0	0	85,000	0
Amerada Hess Corp.									
St. Croix .....	425,000	70,000	450,000	75,000	230,000	0	0	85,000	0

See footnotes at end of table.

**Table 38. Capacity of Operable Petroleum Refineries by State as of January 1, 1997 (Continued)**  
(Barrels per Stream Day, Except Where Noted)

Location	Downstream Charge Capacity (Continued)									
	Catalytic Cracking		Catalytic Hydrocracking	Catalytic Reforming		Catalytic Hydrotreating				Fuel Solvents Deasphalting
	Fresh	Recycled		Low Pressure	High Pressure	Heavy Gas Oil	Naphtha Reformer Feed	Distillate	Other/Residual	
Puerto Rico.....	0	0	15,600	63,200	0	10,000	70,000	0	0	0
Guayama.....	0	0	0	43,200	0	0	50,000	0	0	0
Yabucoa .....	0	0	15,600	20,000	0	10,000	20,000	0	0	0
Virgin Islands.....	130,000	0	0	90,000	25,000	135,000	130,000	160,000	0	0
St. Croix .....	130,000	0	0	90,000	25,000	135,000	130,000	160,000	0	0

\* Includes capacity of Kerr-McGee's Southwestern Refining Company, which was purchased by Koch in 1995.  
E=Estimated. Company was a nonrespondent.  
Source: Energy Information Administration (EIA), Form EIA-820, "Biennial Refinery Report."



**Table 39. Production Capacity of Operable Petroleum Refineries by State as of January 1, 1997**  
(Barrels per Stream Day, Except Where Noted)

State/Refiner/Location	Alkylates	Aromatics	Asphalt and Road Oil	Isomers		Lubricants	Marketable Petroleum Coke	Hydrogen (MMcfd)	Sulfur (short tons per day)
				Isobutane	Isopentane and Isohexane				
<b>Alabama</b> .....	<b>0</b>	<b>0</b>	<b>22,500</b>	<b>1,000</b>	<b>2,800</b>	<b>0</b>	<b>2,500</b>	<b>16</b>	<b>96</b>
Coastal Mobile Refining Co.									
Chickasaw .....	0	0	10,500	0	0	0	0	0	0
Hunt Refining Co.									
Tuscaloosa.....	0	0	12,000	0	0	0	2,500	6	81
Shell Chemical									
Saraland (Mobile).....	0	0	0	1,000	2,800	0	0	10	15
(Formerly LL & E Petroleum Marketing Inc.)									
<b>Alaska</b> .....	<b>0</b>	<b>2,500</b>	<b>2,500</b>	<b>0</b>	<b>4,000</b>	<b>0</b>	<b>0</b>	<b>13</b>	<b>15</b>
Mapco Petroleum Inc.									
North Pole.....	0	2,500	2,500	0	0	0	0	0	0
Tesoro Petroleum Corp.									
Kenai.....	0	0	0	0	4,000	0	0	13	15
<b>Arkansas</b> .....	<b>4,900</b>	<b>0</b>	<b>10,750</b>	<b>0</b>	<b>6,500</b>	<b>4,700</b>	<b>0</b>	<b>3</b>	<b>157</b>
Berry Petroleum Co.									
Stephens.....	0	0	1,000	0	0	0	0	0	0
Cross Oil & Refining Co. Inc.									
Smackover .....	0	0	2,050	0	0	4,700	0	3	0
Lion Oil Co.									
El Dorado .....	4,900	0	7,700	0	6,500	0	0	0	157
<b>California</b> .....	<b>153,000</b>	<b>0</b>	<b>78,413</b>	<b>4,700</b>	<b>71,000</b>	<b>34,900</b>	<b>106,697</b>	<b>1,110</b>	<b>4,228</b>
Arco Products Co.									
Los Angeles .....	13,000	0	0	0	0	0	12,000	75	202
Chevron U.S.A. Inc.									
El Segundo .....	22,000	0	0	0	20,000	0	20,000	130	476
Richmond.....	21,000	0	0	0	28,000	16,300	0	185	440
Exxon Co. U.S.A.									
Benicia .....	14,000	0	0	0	0	0	5,500	104	303
Huntway Refining Co.									
Benicia .....	0	0	3,250	0	0	0	0	0	0
Wilmington .....	0	0	3,500	0	0	0	0	0	0
Kern Oil & Refining Co.									
Bakersfield .....	0	0	0	0	0	0	0	0	4
Lunday Thagard									
South Gate.....	0	0	5,833	0	0	0	0	0	0
Mobil Oil Corp.									
Torrance.....	25,000	0	0	0	0	0	16,000	133	448
Pacific Refining Co.									
Hercules.....	0	0	6,000	0	0	0	0	0	0
Paramount Petroleum Corp.									
Paramount .....	0	0	15,000	0	0	0	0	0	40
Petroleum Fuel & Terminal									
Long Beach.....	0	0	6,630	0	0	0	0	0	0
San Joaquin Refining Co. Inc.									
Bakersfield .....	0	0	8,000	0	0	4,000	0	0	0
Santa Maria Refining Co									
Santa Maria .....	0	0	10,000	0	0	0	0	0	0
(Formerly Conoco Inc)									
Shell Oil Co.									
Martinez.....	11,000	0	15,000	0	0	3,900	5,500	110	437
Tenby Inc.									
Oxnard .....	0	0	1,200	0	0	0	0	0	0

See footnotes at end of table.

**Table 39. Production Capacity of Operable Petroleum Refineries by State as of January 1, 1997 (Continued)**  
(Barrels per Stream Day, Except Where Noted)

State/Refiner/Location	Alkylates	Aromatics	Asphalt and Road Oil	Isomers		Lubricants	Marketable Petroleum Coke	Hydrogen (MMcfd)	Sulfur (short tons per day)
				Isobutane	Isopentane and Isohexane				
<b>Texaco Refining &amp; Marketing Inc.</b>									
Bakersfield .....	0	0	0	700	0	0	6,000	24	94
Wilmington (Los Angeles) .....	9,000	0	0	0	0	0	9,500	69	300
<b>Tosco Refining Co.</b>									
Martinez (Avon) .....	15,000	0	0	0	0	0	1,500	80	200
<b>Ultramar Refining</b>									
Wilmington .....	12,500	0	0	4,000	0	0	6,250	0	220
<b>Unocal Corp.</b>									
Arroyo Grande (Santa Maria) .....	0	0	0	0	0	0	5,610	0	0
Rodeo (San Francisco) .....	0	0	0	0	10,000	4,700	6,337	89	392
Wilmington (Los Angeles) .....	10,500	0	0	0	13,000	0	12,500	111	672
<b>Witco Corp.</b>									
Oilfield .....	0	0	4,000	0	0	6,000	0	0	0
<b>Colorado .....</b>	<b>0</b>	<b>0</b>	<b>9,000</b>	<b>1,783</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>102</b>
<b>Colorado Refining Co.</b>									
Commerce City .....	0	0	0	1,783	0	0	0	0	7
<b>Conoco Inc.</b>									
Commerce City .....	0	0	9,000	0	0	0	0	0	95
<b>Delaware .....</b>	<b>9,100</b>	<b>1,400</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>10,000</b>	<b>40</b>	<b>504</b>
<b>Star Enterprise</b>									
Delaware City .....	9,100	1,400	0	0	0	0	10,000	40	504
<b>Georgia .....</b>	<b>0</b>	<b>0</b>	<b>27,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Citgo Asphalt Refining Co.</b>									
Savannah .....	0	0	24,000	0	0	0	0	0	0
<b>Young Refining Corp.</b>									
Douglasville .....	0	0	3,000	0	0	0	0	0	0
<b>Hawaii .....</b>	<b>5,000</b>	<b>0</b>	<b>16,000</b>	<b>3,200</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>21</b>	<b>34</b>
<b>BHP Petroleum Americas Refining Inc.</b>									
Ewa Beach .....	0	0	1,000	0	0	0	0	18	34
<b>Chevron U.S.A. Inc.</b>									
Honolulu .....	5,000	0	15,000	3,200	0	0	0	3	0
<b>Illinois .....</b>	<b>95,500</b>	<b>8,000</b>	<b>69,250</b>	<b>1,000</b>	<b>11,650</b>	<b>7,600</b>	<b>30,050</b>	<b>85</b>	<b>1,707</b>
<b>Clark Refining &amp; Marketing</b>									
Blue Island .....	5,000	0	10,000	1,000	3,000	0	0	25	22
Hartford .....	8,500	0	250	0	3,750	0	4,800	3	11
<b>Marathon Oil Co.</b>									
Robinson .....	12,500	0	0	0	4,900	0	7,250	0	180
<b>Mobil Oil Corp.</b>									
Joliet .....	27,000	0	4,000	0	0	0	16,000	0	600
<b>Shell Oil Co.</b>									
Wood River .....	22,000	4,500	55,000	0	0	7,600	0	57	504
<b>Uno-Ven Co.</b>									
Lemont (Chicago) .....	20,500	3,500	0	0	0	0	2,000	0	390
<b>Indiana .....</b>	<b>35,700</b>	<b>17,000</b>	<b>72,200</b>	<b>0</b>	<b>27,200</b>	<b>6,400</b>	<b>9,000</b>	<b>35</b>	<b>550</b>
<b>Amoco Oil Co.</b>									
Whiting .....	34,000	17,000	70,000	0	25,000	6,400	9,000	35	550
<b>Countrymark Cooperative Inc.</b>									
Mount Vernon .....	1,700	0	2,200	0	2,200	0	0	0	0

See footnotes at end of table.



**Table 39. Production Capacity of Operable Petroleum Refineries by State as of January 1, 1997 (Continued)**  
(Barrels per Stream Day, Except Where Noted)

State/Refiner/Location	Alkylates	Aromatics	Asphalt and Road Oil	Isomers		Lubricants	Marketable Petroleum Coke	Hydrogen (MMcfd)	Sulfur (short tons per day)
				Isobutane	Isopentane and Isohexane				
<b>Kansas</b>	<b>24,700</b>	<b>3,000</b>	<b>0</b>	<b>2,000</b>	<b>33,000</b>	<b>0</b>	<b>13,423</b>	<b>6</b>	<b>351</b>
Farmland Industries Inc.									
Coffeyville .....	7,200	0	0	0	8,500	0	5,600	0	35
National Cooperative Refinery Assoc.									
McPherson .....	6,000	0	0	2,000	10,000	0	3,323	0	66
Texaco Refining & Marketing Inc.									
El Dorado .....	11,500	3,000	0	0	14,500	0	4,500	6	250
<b>Kentucky</b>	<b>13,000</b>	<b>6,000</b>	<b>30,000</b>	<b>4,000</b>	<b>12,250</b>	<b>8,500</b>	<b>0</b>	<b>20</b>	<b>400</b>
Ashland Oil Inc.									
Catlettsburg .....	13,000	6,000	30,000	4,000	12,000	8,500	0	20	400
Somerset Refinery Inc.									
Somerset .....	0	0	0	0	250	0	0	0	0
<b>Louisiana</b>	<b>196,800</b>	<b>20,900</b>	<b>75,300</b>	<b>14,700</b>	<b>51,300</b>	<b>62,300</b>	<b>86,789</b>	<b>203</b>	<b>4,078</b>
BP Oil Corp.									
Belle Chasse (Alliance) .....	38,000	8,900	0	0	0	0	5,289	40	125
Basis Petroleum Inc.									
(Formerly Phibro Energy USA)									
Krotz Springs .....	0	0	0	2,700	800	0	0	0	10
Calumet Lubricants Co. L.P.									
Princeton .....	0	0	1,700	0	0	6,600	0	5	2
Citgo Petroleum Corp.									
Lake Charles .....	23,000	4,000	0	0	28,000	9,600	22,500	0	690
Conoco Inc.									
Westlake .....	8,000	0	0	0	0	18,000	18,250	0	750
Exxon Co. U.S.A.									
Baton Rouge .....	35,800	0	12,000	0	0	19,000	26,000	19	672
Marathon Oil Co.									
Garyville .....	27,000	0	40,000	12,000	10,000	0	0	0	504
Mobil Oil Corp.									
Chalmette .....	19,000	8,000	0	0	0	0	7,750	0	198
Murphy Oil U.S.A. Inc.									
Meraux .....	8,500	0	18,000	0	0	0	0	0	130
Pennzoil Producing Co.									
Shreveport .....	0	0	3,600	0	0	9,100	0	6	13
Placid Refining Co.									
Port Allen .....	4,000	0	0	0	0	0	0	0	8
Shell Oil Co.									
Norco .....	17,000	0	0	0	0	0	7,000	70	157
Star Enterprise									
Convent .....	16,500	0	0	0	12,500	0	0	63	819
<b>Michigan</b>	<b>9,500</b>	<b>0</b>	<b>28,000</b>	<b>0</b>	<b>9,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>179</b>
Marathon Oil Co.									
Detroit .....	4,200	0	28,000	0	0	0	0	0	120
Total Petroleum Inc.									
Alma .....	5,300	0	0	0	9,000	0	0	0	59
<b>Minnesota</b>	<b>18,900</b>	<b>0</b>	<b>39,000</b>	<b>0</b>	<b>23,300</b>	<b>0</b>	<b>18,000</b>	<b>92</b>	<b>750</b>
Ashland Oil Inc.									
St. Paul .....	5,900	0	14,000	0	8,300	0	0	10	0
Koch Refining Co.									
St. Paul (Pine Bend) .....	13,000	0	25,000	0	15,000	0	18,000	82	750

See footnotes at end of table.

**Table 39. Production Capacity of Operable Petroleum Refineries by State as of January 1, 1997 (Continued)**  
(Barrels per Stream Day, Except Where Noted)

State/Refiner/Location	Alkylates	Aromatics	Asphalt and Road Oil	Isomers		Lubricants	Marketable Petroleum Coke	Hydrogen (MMcfd)	Sulfur (short tons per day)
				Isobutane	Isopentane and Isohexane				
<b>Mississippi</b> .....	<b>16,200</b>	<b>16,000</b>	<b>42,700</b>	<b>0</b>	<b>0</b>	<b>6,400</b>	<b>20,000</b>	<b>238</b>	<b>1,300</b>
Chevron U.S.A. Inc. Pascagoula .....	16,200	16,000	20,000	0	0	0	20,000	230	1,300
Ergon Refining, Inc. Vicksburg .....	0	0	13,000	0	0	6,400	0	8	0
Southland Oil Co. Lumberton .....	0	0	3,575	0	0	0	0	0	0
Sandersville .....	0	0	6,125	0	0	0	0	0	0
<b>Montana</b> .....	<b>14,380</b>	<b>0</b>	<b>27,900</b>	<b>5,050</b>	<b>700</b>	<b>0</b>	<b>5,775</b>	<b>60</b>	<b>372</b>
Cenex Laurel .....	3,780	0	10,000	1,250	0	0	0	12	130
Conoco Inc. Billings .....	6,500	0	6,500	3,800	0	0	3,600	20	242
Exxon Co. U.S.A. Billings .....	3,400	0	10,000	0	0	0	2,175	26	0
Montana Refining Co. Great Falls .....	700	0	1,400	0	700	0	0	2	0
<b>Nevada</b> .....	<b>0</b>	<b>0</b>	<b>3,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Petro Source Refining Partners Eagle Springs .....	0	0	3,000	0	0	0	0	0	0
<b>New Jersey</b> .....	<b>34,500</b>	<b>7,500</b>	<b>106,600</b>	<b>3,500</b>	<b>9,000</b>	<b>12,000</b>	<b>7,500</b>	<b>20</b>	<b>621</b>
Amerada Hess Corp. Port Reading (Sewaren) .....	6,000	0	0	0	0	0	0	0	10
Chevron U.S.A. Inc. Perth Amboy .....	0	0	35,000	0	0	0	0	0	0
Citgo Asphalt Refining Co. Paulsboro .....	0	0	27,600	0	0	0	0	0	0
Coastal Eagle Point Oil Co. Westville .....	4,000	7,500	0	0	9,000	0	0	0	20
Mobil Oil Corp. Paulsboro .....	11,000	0	6,000	0	0	12,000	7,500	8	158
Tosco Refining Co. (Formerly Bayway Refining Co.) Linden (Bayway) .....	13,500	0	38,000	3,500	0	0	0	12	433
<b>New Mexico</b> .....	<b>11,200</b>	<b>0</b>	<b>6,400</b>	<b>0</b>	<b>11,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>26</b>
Giant Industries Inc. Bloomfield .....	0	0	0	0	0	0	0	0	2
(Formerly Bloomfield Refining Co.) Gallup .....	1,800	0	0	0	4,000	0	0	0	2
Navajo Refining Co. Artesia .....	9,400	0	6,400	0	7,000	0	0	0	22
<b>North Dakota</b> .....	<b>5,600</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>5,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>17</b>
Amoco Oil Co. Mandan .....	5,600	0	0	0	5,000	0	0	0	17
<b>Ohio</b> .....	<b>27,300</b>	<b>14,000</b>	<b>28,500</b>	<b>4,500</b>	<b>24,000</b>	<b>200</b>	<b>8,200</b>	<b>101</b>	<b>204</b>
Ashland Oil Inc. Canton .....	8,000	0	12,000	0	6,500	0	0	0	0

See footnotes at end of table.



**Table 39. Production Capacity of Operable Petroleum Refineries by State as of January 1, 1997 (Continued)**  
(Barrels per Stream Day, Except Where Noted)

State/Refiner/Location	Alkylates	Aromatics	Asphalt and Road Oil	Isomers		Lubricants	Marketable Petroleum Coke	Hydrogen (MMcfd)	Sulfur (short tons per day)
				Isobutane	Isopentane and Isohexane				
BP Oil Corp.									
Lima .....	0	5,000	2,000	4,500	17,500	0	4,000	29	42
Toledo .....	11,500	0	12,000	0	0	0	4,200	24	100
Sun Co Inc.									
Toledo .....	7,800	9,000	2,500	0	0	200	0	48	62
<b>Oklahoma</b> .....	<b>29,400</b>	<b>0</b>	<b>18,300</b>	<b>8,400</b>	<b>24,770</b>	<b>8,200</b>	<b>7,050</b>	<b>35</b>	<b>169</b>
Conoco Inc.									
Ponca City .....	14,500	0	0	7,500	8,570	0	4,800	0	39
Sinclair Oil Corp.									
Tulsa .....	3,600	0	7,300	0	5,200	0	0	0	20
Sun Co Inc.									
Tulsa .....	0	0	0	900	0	8,200	2,250	0	0
Total Petroleum Inc.									
Ardmore .....	6,300	0	6,000	0	7,000	0	0	26	110
Wynnewood Refining Co. (Formerly Kerr-McGee Refining Corp.)									
Wynnewood .....	5,000	0	5,000	0	4,000	0	0	9	0
<b>Oregon</b> .....	<b>0</b>	<b>0</b>	<b>11,250</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Chevron U.S.A. Inc.									
Portland (Willbridge) .....	0	0	11,250	0	0	0	0	0	0
<b>Pennsylvania</b> .....	<b>33,300</b>	<b>11,000</b>	<b>14,000</b>	<b>5,000</b>	<b>7,950</b>	<b>6,850</b>	<b>0</b>	<b>11</b>	<b>300</b>
Pennzoil Producing Co.									
Rouseville .....	0	0	0	0	1,150	4,750	0	4	0
Sun Co Inc.									
Marcus Hook .....	12,000	7,000	0	0	0	0	0	7	0
Sun Refining & Marketing									
Philadelphia .....	18,300	4,000	0	5,000	0	0	0	0	260
United Refining Co.									
Warren .....	3,000	0	14,000	0	6,800	0	0	0	40
Witco Corp.									
Bradford .....	0	0	0	0	0	2,100	0	0	0
<b>Tennessee</b> .....	<b>4,400</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4,200</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>48</b>
Mapco Petroleum Inc.									
Memphis .....	4,400	0	0	0	4,200	0	0	0	48
<b>Texas</b> .....	<b>318,600</b>	<b>180,357</b>	<b>85,400</b>	<b>38,500</b>	<b>121,425</b>	<b>80,700</b>	<b>101,975</b>	<b>846</b>	<b>9,626</b>
Age Refining & Marketing									
San Antonio .....	0	1,200	0	0	0	0	0	0	0
Amoco Oil Co.									
Texas City .....	62,000	45,000	0	0	28,000	0	12,500	213	1,400
Basis Petroleum Inc. (Formerly Phibro Energy USA)									
Houston .....	8,500	0	8,000	0	0	0	0	0	100
Texas City .....	8,000	0	0	0	6,000	0	0	0	595
Chevron U.S.A. Inc.									
El Paso .....	9,000	0	5,600	5,000	0	0	0	0	64
Citgo Refining & Chemical Inc.									
Corpus Christi .....	19,200	9,957	0	0	0	0	10,300	0	272
Clark Refining and Marketing									
Port Arthur .....	12,000	0	0	2,000	0	0	9,000	0	900
(Formerly Chevron U.S.A. Inc.)									

See footnotes at end of table.

**Table 39. Production Capacity of Operable Petroleum Refineries by State as of January 1, 1997 (Continued)**  
(Barrels per Stream Day, Except Where Noted)

State/Refiner/Location	Alkylates	Aromatics	Asphalt and Road Oil	Isomers		Lubricants	Marketable Petroleum Coke	Hydrogen (MMcfd)	Sulfur (short tons per day)
				Isobutane	Isopentane and Isohexane				
Coastal Refining & Marketing Inc.									
Corpus Christi.....	3,000	19,100	10,000	0	5,200	0	4,750	24	185
Crown Central Petroleum Corp.									
Pasadena .....	10,000	0	0	0	5,000	0	1,500	0	20
Deer Park Refg Ltd Partnership									
Deer Park .....	16,800	0	5,400	0	0	10,500	18,350	105	1,105
Diamond Shamrock Refining & Marketing Co.									
Sunray (McKee) .....	10,000	0	9,200	0	0	0	0	0	28
Three Rivers .....	6,000	0	500	0	0	1,800	0	8	70
Exxon Co. U.S.A.									
Baytown.....	29,000	0	7,000	0	0	31,300	2,500	147	1,200
Fina Oil & Chemical Co.									
Big Spring.....	5,000	1,000	7,600	0	0	0	0	0	138
Port Arthur .....	5,900	12,400	4,000	0	8,800	0	0	0	300
Koch Refining Co.									
Corpus Christi * .....	17,500	26,000	0	0	10,000	0	2,800	0	120
La Gloria Oil & Gas Co.									
Tyler.....	4,700	0	0	500	4,000	0	1,500	0	15
Lyondell Citgo Refining Co. Ltd.									
Houston.....	0	36,000	0	0	0	6,600	10,900	0	600
Marathon Oil Co.									
Texas City.....	10,000	2,500	0	0	0	0	0	0	0
Mobil Oil Corp.									
Beaumont.....	13,500	7,000	0	0	20,000	11,000	11,875	45	560
Neste Trifinery Petro Serve									
Corpus Christi.....	0	0	16,000	0	0	0	0	0	0
Petrolite Corp.									
Kilgore .....	0	0	100	0	0	0	0	0	0
Phillips 66 Co.									
Borger.....	14,000	0	0	11,000	24,600	0	0	50	340
Sweeny.....	20,000	5,300	0	0	9,000	0	0	120	385
Shell Oil Co.									
Odessa .....	3,300	0	0	0	0	0	0	0	0
South Hampton Refining Co.									
Silsbee.....	0	400	0	0	825	0	0	2	0
Star Enterprise									
Port Arthur/Neches .....	20,000	0	0	0	0	19,500	16,000	0	781
Valero Refining Co.									
Corpus Christi.....	11,200	14,500	12,000	20,000	0	0	0	132	448
<b>Utah</b> .....	<b>14,600</b>	<b>0</b>	<b>5,800</b>	<b>2,600</b>	<b>4,300</b>	<b>0</b>	<b>1,900</b>	<b>0</b>	<b>51</b>
Amoco Oil Co.									
Salt Lake City .....	5,200	0	0	0	0	0	0	0	15
Big West Oil Co.									
North Salt Lake .....	1,400	0	0	1,300	1,700	0	0	0	4
Chevron U.S.A. Inc.									
Salt Lake City .....	5,600	0	0	1,300	0	0	1,900	0	22
Crysen Refining Inc.									
Woods Cross .....	E <sub>0</sub>	E <sub>0</sub>	E <sub>4,100</sub>	E <sub>0</sub>	E <sub>0</sub>	E <sub>0</sub>	E <sub>0</sub>	E <sub>0</sub>	E <sub>0</sub>
Phillips 66 Co.									
Woods Cross .....	2,400	0	1,700	0	2,600	0	0	0	10
<b>Virginia</b> .....	<b>3,500</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>5,050</b>	<b>0</b>	<b>73</b>
Amoco Oil Co.									
Yorktown.....	3,500	0	0	0	0	0	5,050	0	73

See footnotes at end of table.



**Table 39. Production Capacity of Operable Petroleum Refineries by State as of January 1, 1997 (Continued)**  
(Barrels per Stream Day, Except Where Noted)

State/Refiner/Location	Alkylates	Aromatics	Asphalt and Road Oil	Isomers		Lubricants	Marketable Petroleum Coke	Hydrogen (MMcfd)	Sulfur (short tons per day)
				Isobutane	Isopentane and Isohexane				
<b>Washington</b> .....	<b>29,300</b>	<b>0</b>	<b>15,200</b>	<b>8,600</b>	<b>2,500</b>	<b>0</b>	<b>21,500</b>	<b>90</b>	<b>374</b>
Arco Products Co.									
Ferndale (Cherry Point) .....	0	0	0	5,000	0	0	14,000	90	212
Chevron U.S.A. Inc.									
Richmond Beach .....	0	0	4,200	0	0	0	0	0	0
Shell Oil Co.									
Anacortes .....	12,400	0	0	3,600	0	0	0	0	0
Sound Refining Inc.									
Tacoma .....	0	0	3,000	0	0	0	0	0	0
Texaco Refining & Marketing Inc.									
Anacortes (Puget Sound) .....	10,400	0	0	0	0	0	7,500	0	112
Tosco Refining Co.									
(Formerly Tosco Northwest Co.)									
Ferndale .....	6,500	0	0	0	0	0	0	0	40
U.S. Oil & Refining Co.									
Tacoma .....	0	0	8,000	0	2,500	0	0	0	10
<b>West Virginia</b> .....	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>5,056</b>	<b>0</b>	<b>1</b>	<b>0</b>
Quaker State Corp.									
Newell (Congo) .....	0	0	0	0	0	5,056	0	1	0
<b>Wisconsin</b> .....	<b>1,500</b>	<b>0</b>	<b>7,500</b>	<b>0</b>	<b>2,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>12</b>
Murphy Oil U.S.A. Inc.									
Superior .....	1,500	0	7,500	0	2,000	0	0	0	12
<b>Wyoming</b> .....	<b>10,034</b>	<b>0</b>	<b>19,400</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,500</b>	<b>6</b>	<b>122</b>
Frontier Refining									
Cheyenne .....	4,200	0	10,000	0	0	0	2,500	6	80
Little America Refining Co.									
Evansville (Casper) .....	0	0	4,400	0	0	0	0	0	0
Sinclair Oil Corp.									
Sinclair .....	5,000	0	5,000	0	0	0	0	0	40
Wyoming Refining Co.									
Newcastle .....	834	0	0	0	0	0	0	0	2
<b>U.S. Total</b> .....	<b>1,119,914</b>	<b>287,657</b>	<b>871,863</b>	<b>108,533</b>	<b>468,845</b>	<b>243,806</b>	<b>457,909</b>	<b>3,052</b>	<b>26,466</b>
<b>Puerto Rico</b> .....	<b>0</b>	<b>15,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>9,500</b>	<b>0</b>	<b>19</b>	<b>50</b>
Phillips Puerto Rico Core Inc.									
Guayama .....	0	15,000	0	0	0	0	0	0	0
Sun Co Inc.									
Yabucoa .....	0	0	0	0	0	9,500	0	19	50
<b>Virgin Islands</b> .....	<b>20,000</b>	<b>20,000</b>	<b>0</b>	<b>0</b>	<b>18,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>600</b>
Amerada Hess Corp.									
St. Croix .....	20,000	20,000	0	0	18,000	0	0	0	600

MMcfd = Million cubic feet per day.

\* Includes capacity of Kerr-McGee's Southwestern Refining Company, which was purchased by Koch in 1995.

E=Estimated. Company was a nonrespondent.

Source: Energy Information Administration (EIA), Form EIA-820, "Biennial Refinery Report."

Table 40. Refiners' Operable Atmospheric Crude Oil Distillation Capacity as of January 1, 1997

Refiner	Barrels per Calendar Day	Refiner	Barrels per Calendar Day
Companies with Capacity Over 100,000 bbl/cd			
CHEVRON CORPORATION.....	1,047,000	STAR ENTERPRISE .....	605,000
Chevron U.S.A. Inc.		Port Arthur/Neches, Texas.....	235,000
Pascagoula, Mississippi .....	295,000	Convent, Louisiana.....	230,000
El Segundo, California .....	258,000	Delaware City, Delaware .....	140,000
Richmond, California .....	225,000	USX CORPORATION.....	570,000
El Paso, Texas.....	90,000	Marathon Oil Co.	
Perth Amboy, New Jersey .....	80,000	Garyville, Louisiana .....	255,000
Honolulu, Hawaii .....	54,000	Robinson, Illinois .....	175,000
Salt Lake City, Utah.....	45,000	Detroit, Michigan.....	70,000
		Texas City, Texas .....	70,000
EXXON CORPORATION .....	1,017,000		
Exxon Co. U.S.A.		BP AMERICA, INC .....	563,900
Baton Rouge, Louisiana .....	432,000	BP Oil Corp.	
Baytown, Texas .....	411,000	Belle Chasse (Alliance), Louisiana .....	250,400
Benicia, California .....	128,000	Lima, Ohio .....	161,500
Billings, Montana .....	46,000	Toledo, Ohio .....	152,000
AMOCO CORPORATION U.S.A.....	1,009,700	KOCH INDUSTRIES, INC .....	514,000
Amoco Oil Co.		Koch Refining Co.	
Texas City, Texas .....	433,000	Corpus Christi, Texas <sup>c</sup> .....	264,000
Whiting, Indiana .....	410,000	St. Paul (Pine Bend), Minnesota .....	250,000
Mandan, North Dakota .....	58,000		
Yorktown, Virginia.....	56,700	PDV AMERICA, INC <sup>d</sup> .....	506,000
Salt Lake City, Utah.....	52,000	Citgo Petroleum Corp.	
MOBIL OIL CORPORATION .....	951,700	Lake Charles, Louisiana .....	305,000
Beaumont, Texas .....	310,700	Citgo Refining & Chemical Inc.	
Joliet, Illinois .....	200,000	Corpus Christi, Texas .....	133,000
Chalmette, Louisiana .....	159,000	Citgo Asphalt Refining Co.	
Paulsboro, New Jersey .....	152,000	Paulsboro, New Jersey.....	40,000
Torrance, California .....	130,000	Savannah, Georgia.....	28,000
SHELL OIL COMPANY .....	897,200	E I DUPONT DE NEMOURS .....	490,500
Shell Oil Co.		Conoco Inc.	
Wood River, Illinois.....	274,500	Westlake, Louisiana .....	226,000
Norco, Louisiana .....	218,000	Ponca City, Oklahoma .....	155,000
Martinez, California .....	155,200	Commerce City, Colorado .....	57,500
Anacortes, Washington .....	108,200	Billings, Montana .....	52,000
Odessa, Texas .....	28,300	ATLANTIC RICHFIELD COMPANY .....	484,000
Shell Chemical		Arco Products Co.	
Saraland (Mobile), Alabama <sup>a</sup> .....	75,000	Los Angeles, California .....	255,000
Saint Rose, Louisiana <sup>b</sup> .....	38,000	Ferndale (Cherry Point), Washington .....	202,000
SUN COMPANY, INC .....	704,000	Arco Alaska Inc.	
Sun Co Inc.		Prudhoe Bay, Alaska .....	15,000
Marcus Hook, Pennsylvania.....	175,000	Kuparuk (Anchorage), Alaska .....	12,000
Toledo, Ohio .....	129,000	TOSCO CORPORATION .....	466,000
Tulsa, Oklahoma .....	85,000	Tosco Refining Co.	
Sun Refining & Marketing		Linden (Bayway), New Jersey <sup>e</sup> .....	240,000
Philadelphia, Pennsylvania .....	315,000		

See footnotes at end of table.



**Table 40. Refiners' Operable Atmospheric Crude Oil Distillation Capacity as of January 1, 1997**  
(Continued)

Refiner	Barrels per Calendar Day	Refiner	Barrels per Calendar Day
Martinez (Avon), California .....	137,500	UNOCAL CORPORATION .....	243,500
Ferndale, Washington <sup>f</sup> .....	88,500	Wilmington (Los Angeles), California .....	127,500
TEXACO, INC .....	357,250	Rodeo (San Francisco), California .....	76,000
Texaco Refining & Marketing Inc.		Arroyo Grande (Santa Maria), California .....	40,000
Anacortes (Puget Sound), Washington .....	132,000	MAPCO, INC .....	237,600
El Dorado, Kansas .....	98,750	Mapco Petroleum Inc.	
Wilmington (Los Angeles), California .....	68,500	North Pole, Alaska .....	132,600
Bakersfield, California .....	58,000	Memphis, Tennessee .....	105,000
ASHLAND OIL, INC .....	354,300	FINA OIL & CHEMICAL COMPANY .....	233,500
Catlettsburg, Kentucky .....	219,300	Fina Oil & Chemical Co.	
St. Paul, Minnesota .....	69,000	Port Arthur, Texas .....	178,500
Canton, Ohio .....	66,000	Big Spring, Texas .....	55,000
TRIZACHHAHM CORPORATION <sup>g</sup> .....	348,015	DIAMOND SHAMROCK REFINING & MARKETING .....	223,000
Clark Refining and Marketing		Sunray (McKee), Texas .....	140,000
Port Arthur, Texas <sup>h</sup> .....	203,500	Three Rivers, Texas .....	83,000
Blue Island, Illinois .....	80,515	CROWN CENTRAL PETROLEUM CORPORATION .....	155,000
Hartford, Illinois .....	64,000	Crown Central Petroleum Corp.	
PHILLIPS PETROLEUM COMPANY .....	345,000	Pasadena, Texas .....	100,000
Phillips 66 Co.		La Gloria Oil & Gas Co.	
Sweeny, Texas .....	200,000	Tyler, Texas .....	55,000
Borger, Texas .....	120,000	UNO-VEN COMPANY, THE	
Woods Cross, Utah .....	25,000	Lemont (Chicago), Illinois .....	153,700
SALOMON, INC .....	279,600	TOTAL PETROLEUM NORTH AMERICA, LTD .....	147,000
Basis Petroleum Inc. <sup>i</sup> .....	148,600	Total Petroleum Inc.	
Texas City, Texas .....	71,000	Ardmore, Oklahoma .....	68,000
Houston, Texas .....	60,000	Alma, Michigan .....	51,000
Krotz Springs, Los Angeles .....		Colorado Refining Co.	
SHELL OIL/PMI HOLDING NORTH AMERICA		Commerce City, Colorado .....	28,000
Deer Park Refg Ltd Partnership		SINCLAIR OIL CORPORATION .....	135,500
Deer Park, Texas .....	255,700	Tulsa, Oklahoma .....	57,000
LYONDELL PETROCHEMICAL COMPANY		Sinclair, Wyoming .....	54,000
Lyondell Citgo Refining Co. Ltd.		Little America Refining Co.	
Houston, Texas .....	255,000	Evansville (Casper), Wyoming .....	24,500
COASTAL CORPORATION, THE .....	244,500	MURPHY OIL CORPORATION .....	131,000
Coastal Eagle Point Oil Co.		Murphy Oil U.S.A. Inc.	
Westville, New Jersey .....	133,000	Meraux, Louisiana .....	95,000
Coastal Refining & Marketing Inc.		Superior, Wisconsin .....	36,000
Corpus Christi, Texas .....	95,000		
Coastal Mobile Refining Co.			
Chickasaw, Alabama .....	16,500		

See footnotes at end of table.

**Table 40. Refiners' Operable Atmospheric Crude Oil Distillation Capacity as of January 1, 1997**  
(Continued)

Refiner	Barrels per Calendar Day	Refiner	Barrels per Calendar Day
CENEX.....	115,050		
National Cooperative Refinery Assoc. McPherson, Kansas .....	73,600	COASTAL CORPORATION/SINOCHEM Pacific Refining Co. Hercules, California .....	50,000
Cenex Laurel, Montana .....	41,450		
		PLACID REFINING COMPANY Port Allen, Louisiana.....	48,500
FARMLAND INDUSTRIES, INC CRA Coffeyville, Kansas .....	112,000		
		GARY WILLIAMS COMPANY <sup>j</sup> Wynnewood Refining Co. Wynnewood, Oklahoma .....	43,000
<b>Total.....</b>	<b>14,152,215</b>		
<b>Companies with Capacity 30,001 to 100,000 bbl/cd</b>			
		PRIDE REFINING, INC Abilene, Texas .....	42,750
BHP PETROLEUM AMERICAS (HAWAII), INC BHP Petroleum Americas Refining Inc. Ewa Beach, Hawaii .....	93,500	PARAMOUNT ACQUISITION CORPORATION Paramount Petroleum Corp. Paramount, California.....	42,500
TESORO PETROLEUM CORPORATION Kenai, Alaska.....	72,000	TIME OIL COMPANY U.S. Oil & Refining Co. Tacoma, Washington .....	40,000
ULTRAMAR CORPORATION Ultramar Refining Wilmington, California .....	68,000	WAINOCO OIL CORPORATION Frontier Refining Cheyenne, Wyoming .....	38,670
HOLLY CORPORATION .....	64,000		
Navajo Refining Co. Artesia, New Mexico.....	57,000	GIANT INDUSTRIES, INC .....	37,600
Montana Refining Co. Great Falls, Montana.....	7,000	Giant Refining Co. Gallup, New Mexico .....	20,800
		Giant Industries Inc. Bloomfield, New Mexico <sup>k</sup> .....	16,800
PENNZOIL COMPANY, INC .....	61,900		
Pennzoil Producing Co. Shreveport, Louisiana .....	46,200	HUNT CONSOLIDATED, INC Hunt Refining Co. Tuscaloosa, Alabama .....	33,500
Rouseville, Pennsylvania .....	15,700		
UNITED REFINING, INC United Refining Co. Warren, Pennsylvania .....	60,000	<b>Total.....</b>	<b>899,670</b>
		<b>Companies with Capacity 10,001 to 30,000 bbl/cd</b>	
LION OIL COMPANY El Dorado, Arkansas.....	52,000		
		VALERO ENERGY CORPORATION Valero Refining Co. Corpus Christi, Texas .....	29,900
PETRO STAR, INC .....	51,750		
Valdez, Alaska .....	38,000		
North Pole, Alaska.....	13,750		

See footnotes at end of table.



**Table 40. Refiners' Operable Atmospheric Crude Oil Distillation Capacity as of January 1, 1997**  
(Continued)

Refiner	Barrels per Calendar Day	Refiner	Barrels per Calendar Day
GOLD LINE REFINING, LTD Lake Charles, Louisiana.....	27,600	WYOMING REFINING, COMPANY Newcastle, Wyoming .....	12,555
NESTE TRIFINERY PETROLEUM SERVICE Corpus Christi, Texas .....	27,000	QUAKER STATE CORPORATION Newell (Congo), West Virginia.....	11,500
CRYSSEN CORPORATION.....	24,400	APEX OIL COMPANY, INC Petroleum Fuel & Terminal Long Beach, California .....	10,800
Crysen Refining Inc. Woods Cross, Utah .....	<sup>E</sup> 12,500	<b>Total</b> .....	<b>319,360</b>
Sound Refining Inc. Tacoma, Washington.....	11,900		
SAN JOAQUIN REFINING COMPANY, INC Bakersfield, California .....	24,300	<b>Companies with Capacity 10,000 bbl/cd or Less</b>	
FLYING J, INC Big West Oil Co. North Salt Lake, Utah.....	24,000	WITCO CORPORATION Bradford, Pennsylvania .....	10,000
ERGON, INC Ergon Refining, Inc. Vicksburg, Mississippi .....	23,000	ANCHOR GASOLINE CORPORATION Canal Refining Co. Church Point, Louisiana .....	9,500
COUNTRYMARK COOPERATIVE, INC Mount Vernon, Indiana .....	22,000	SABA PETROLEUM, INC <sup>m</sup> Santa Maria Refining Co Santa Maria, California.....	9,500
KERN OIL & REFINING COMPANY Bakersfield, California .....	21,400	WORLD OIL COMPANY Lunday Thagard South Gate, California .....	8,100
SOUTHLAND OIL COMPANY <sup>l</sup> .....	16,800	PETRO SOURCE REFINING CORPORATION <sup>n</sup> Petro Source Refining Partners Eagle Springs, Nevada.....	7,000
Sandersville, Mississippi .....	11,000		
Lumberton, Mississippi.....	5,800	MARTIN GAS SALES, INC Berry Petroleum Co. Stephens, Arkansas .....	6,700
CALUMET LUBRICANTS COMPANY LP .....	16,100	AGE REFINING, INC Age Refining & Marketing San Antonio, Texas .....	6,500
Princeton, Louisiana.....	8,300		
Cotton Valley, Louisiana <sup>j</sup> .....	7,800	CROSS OIL & REFINING COMPANY, INC Smackover, Arkansas .....	6,200
HUNTWAY REFINING COMPANY .....	14,005		
Benicia, California .....	8,505		
Wilmington, California .....	5,500		
TRANSWORLD OIL USA, INC Calcasieu Refining Co. Lake Charles, Louisiana.....	14,000		

See footnotes at end of table.

Table 40. Refiners' Operable Atmospheric Crude Oil Distillation Capacity as of January 1, 1995  
(Continued)

Refiner	Barrels per Calendar Day	Refiner	Barrels per Calendar Day
YOUNG REFINING CORPORATION		HOWELL CORPORATION	
Douglasville, Georgia .....	5,540	Howell Hydrocarbons & Chemical Inc. Channelview, Texas.....	1,400
SOMERSET REFINERY, INC		PETROLITE CORPORATION	
Somerset, Kentucky .....	5,500	Kilgore, Texas.....	600
OIL HOLDING, INC			
Tenby Inc.		<b>Total .....</b>	<b>80,540</b>
Oxnard, California .....	4,000		
		<b>U.S. Total .....</b>	<b>15,451,785</b>

<sup>a</sup>Formerly LL&E Petroleum Marketing, Inc.  
<sup>b</sup>Formerly Enjet Inc., Saint Rose Refining.  
<sup>c</sup>Includes purchase of Kerr-McGee Corporation's Southwestern Refining Company, Inc.  
<sup>d</sup>Formerly Petroleos de Venezuela.  
<sup>e</sup>Formerly Bayway Refining Company.  
<sup>f</sup>Formerly Tosco Northwest Company.  
<sup>g</sup>Formerly Horsham Corporation.  
<sup>h</sup>Formerly Chevron Corporation.  
<sup>i</sup>Formerly Phibro Energy USA.  
<sup>j</sup>Formerly Kerr-McGee Corporation.  
<sup>k</sup>Formerly Gary Williams Company's Bloomfield Refining.  
<sup>l</sup>Formerly VGS Corporation.  
<sup>m</sup>Formerly Conoco, reactivated in 1995.  
<sup>n</sup>Formerly Bechtel Investment, Inc.  
E=Estimated. Company was a nonrespondent.  
Source: Energy Information Administration (EIA), Form EIA-820, "Biennial Refinery Report."



**Table 41. Operable Crude Oil and Downstream Charge Capacity of Petroleum Refineries, January 1, 1981 to January 1, 1997**

(Thousand Barrels per Stream Day, Except Where Noted)

Year/PAD District	Atmospheric Crude Oil Distillation	Downstream Charge Capacity							
		Vacuum Distillation	Thermal Cracking	Catalytic Cracking		Catalytic Hydro-cracking	Catalytic Reforming	Catalytic Hydro-treating	Fuels Solvent Deasphalting
				Fresh	Recycled				
JAN 1, 1981	19,763	7,033	1,587	5,543	594	909	4,098	8,487	NA
JAN 1, 1982	19,018	7,197	1,782	5,474	562	892	3,966	8,539	NA
JAN 1, 1983	17,871	7,180	1,715	5,402	488	883	3,918	8,354	NA
JAN 1, 1984	17,059	7,165	1,852	5,310	492	952	3,907	9,009	NA
JAN 1, 1985	16,504	6,998	1,858	5,232	507	1,053	3,750	8,897	NA
JAN 1, 1986	16,346	6,892	1,880	5,214	463	1,125	3,744	8,791	NA
JAN 1, 1987	16,460	6,935	1,928	5,251	466	1,189	3,805	9,083	230
JAN 1, 1988	16,825	7,198	2,080	5,424	381	1,202	3,891	9,170	240
JAN 1, 1989	16,568	7,225	2,073	5,324	326	1,238	3,911	9,440	245
JAN 1, 1990	16,507	7,245	2,108	5,441	314	1,282	3,896	9,537	279
JAN 1, 1991	16,557	7,276	2,158	5,559	304	1,308	3,926	9,676	271
JAN 1, 1992	16,633	7,172	2,100	5,608	280	1,363	3,907	9,644	276
JAN 1, 1993	15,935	6,892	2,082	5,540	244	1,397	3,728	9,677	269
JAN 1, 1994	15,904	6,892	2,107	5,586	191	1,376	3,875	10,616	261
JAN 1, 1995	16,326	7,248	2,123	5,583	169	1,386	3,867	10,916	251
JAN 1, 1997	16,287	7,349	2,050	5,595	155	1,388	3,727	11,041	275
PADD I	1,538	634	90	622	12	40	285	809	21
PADD II	3,625	1,455	421	1,259	34	151	892	2,467	16
PADD III	7,484	3,542	884	2,738	85	674	1,823	5,403	161
PADD IV	542	209	40	178	19	9	117	345	9
PADD V	3,099	1,509	616	798	5	514	610	2,017	68
JAN 1, 1998	16,454	7,421	2,097	5,598	162	1,388	3,742	11,087	275
PADD I	1,568	634	90	622	12	40	285	809	21
PADD II	3,634	1,455	421	1,259	34	151	892	2,467	16
PADD III	7,611	3,614	931	2,742	92	674	1,838	5,448	161
PADD IV	542	209	40	178	19	9	117	346	9
PADD V	3,099	1,509	616	798	5	514	610	2,017	68
1997-1998 (Net Change)	167	72	47	4	7	0	15	46	0
PADD I	30	0	0	0	0	0	0	0	0
PADD II	10	0	0	0	0	0	0	0	0
PADD III	127	72	47	4	7	0	15	45	0
PADD IV	0	0	0	0	0	0	0	1	0
PADD V	0	0	0	0	0	0	0	0	0

NA = Not available.

Note: Totals may not equal sum of components due to independent rounding.

Source: Energy Information Administration (EIA), Form EIA-820, "Annual and Biennial Refinery Report."

**Table 42. Operable Production Capacity of Petroleum Refineries, January 1, 1981 to January 1, 1997**  
(Thousand Barrels per Stream Day, Except Where Noted)

Year/PAD District	Production Capacity							
	Alkylates	Aromatics	Asphalt and Road Oil	Isomers	Lubricants	Marketable Petroleum Coke	Hydrogen (MMcfd)	Sulfur (short tons/day)
JAN 1, 1981	974	299	765	131	234	276	2,054	NA
JAN 1, 1982	984	290	740	162	242	267	1,944	NA
JAN 1, 1983	960	237	722	212	241	296	2,298	NA
JAN 1, 1984	945	218	800	208	241	407	2,444	NA
JAN 1, 1985	917	215	767	219	243	424	2,572	NA
JAN 1, 1986	941	276	804	258	246	356	2,357	NA
JAN 1, 1987	974	287	788	326	250	364	2,569	23,806
JAN 1, 1988	993	289	788	465	232	368	2,418	27,639
JAN 1, 1989	1,015	290	823	469	230	333	2,501	28,369
JAN 1, 1990	1,030	290	844	456	232	341	2,607	24,202
JAN 1, 1991	1,077	292	866	490	229	367	2,527	23,875
JAN 1, 1992	1,095	290	812	494	217	356	2,644	23,811
JAN 1, 1993	1,083	286	814	499	217	393	2,674	25,940
JAN 1, 1994	1,086	278	793	499	213	410	2,940	24,554
JAN 1, 1995	1,105	285	846	502	217	427	3,139	24,885
JAN 1, 1997	1,120	288	872	577	244	458	3,052	26,466
PADD I	80	20	148	25	24	23	72	1,498
PADD II	266	48	293	196	31	86	374	4,387
PADD III	548	217	243	247	154	211	1,306	15,283
PADD IV	39	0	62	14	0	10	66	647
PADD V	187	3	126	94	35	128	1,234	4,651
JAN 1, 1998	1,128	288	874	582	245	472	3,052	26,737
PADD I	80	20	148	25	24	23	72	1,498
PADD II	270	48	293	196	31	86	374	4,490
PADD III	552	217	245	251	155	225	1,306	15,451
PADD IV	39	0	62	14	0	10	66	647
PADD V	187	3	126	94	35	128	1,234	4,651
1997-1998 (Net Change)	9	0	2	4	1	14	0	271
PADD I	0	0	0	0	0	0	0	0
PADD II	4	0	0	0	0	0	0	103
PADD III	5	0	2	4	1	14	0	168
PADD IV	0	0	0	0	0	0	0	0
PADD V	0	0	0	0	0	0	0	0

NA = Not available. MMcfd = Million cubic feet per day.

(s) = Less than 500 barrels per stream day.

Note: Totals may not equal sum of components due to independent rounding.

Source: Energy Information Administration (EIA), Form EIA-820, "Annual and Biennial Refinery Report."



**Table 43. Working Storage Capacity<sup>a</sup> at Operable Refineries by PAD District  
as of January 1, 1997  
(Thousand Barrels)**

Commodity	PAD Districts					United States
	I	II	III	IV	V	
<b>Crude Oil</b> .....	22,761	22,125	74,949	3,638	34,962	158,435
<b>Liquefied Petroleum Products</b> .....	3,333	8,778	24,371	538	1,865	38,885
Propane/Propylene .....	921	4,327	9,817	168	191	15,424
Normal Butane/Butylene .....	2,412	4,451	14,554	370	1,674	23,461
<b>Other Liquids</b> .....	9,268	16,249	33,072	3,628	16,937	79,154
Oxygenates .....	2,323	983	3,752	116	3,233	10,407
Fuel Ethanol .....	0	90	44	91	0	225
Methanol .....	250	44	566	0	90	950
MTBE .....	1,973	849	2,832	25	3,143	8,822
Other Oxygenates <sup>b</sup> .....	100	0	310	0	0	410
Gasoline Blending Components .....	6,945	15,266	29,320	3,512	13,704	68,747
<b>Petroleum Products</b> .....	53,162	94,172	213,017	17,471	90,494	468,316
Finished Motor Gasoline .....	8,613	19,868	27,975	3,696	14,929	75,081
Reformulated .....	5,183	1,843	5,061	0	8,012	20,099
Oxygenated .....	136	1,137	386	200	0	1,859
Other Finished .....	3,294	16,888	22,528	3,496	6,917	53,123
Jet Fuel .....	2,229	4,104	11,974	751	6,951	26,009
Naphtha-Type .....	0	134	0	108	71	313
Kerosene-Type .....	2,229	3,970	11,974	643	6,880	25,696
Kerosene .....	153	1,398	3,136	269	251	5,207
Distillate Fuel Oil .....	10,508	19,031	26,909	3,317	10,657	70,422
0.05 percent sulfur and under .....	3,379	10,744	13,692	2,289	6,561	36,665
Greater than 0.05 percent sulfur .....	7,129	8,287	13,217	1,028	4,096	33,757
Residual Fuel Oil .....	3,800	4,721	13,111	1,083	7,317	30,032
Lubricants .....	2,802	2,127	14,575	0	2,137	21,641
Asphalt and Road Oil .....	4,176	11,209	5,772	4,090	4,513	29,760
Other Products <sup>c</sup> .....	20,881	31,714	109,565	4,265	43,739	210,164
<b>Total</b> .....	88,524	141,324	345,409	25,275	144,258	744,790

<sup>a</sup> The difference in volume between the maximum safe fill capacity and tank bottoms.

<sup>b</sup> Includes ethyl tertiary butyl ether (ETBE), tertiary amyl methyl ether (TAME), tertiary butyl alcohol (TBA), and other aliphatic alcohols and ethers intended for motor gasoline blending (e.g., isopropyl ether (IPE) or n-propanol).

<sup>c</sup> Includes ethane/ethylene, isobutane/isobutylene, pentanes plus, other hydrocarbons/hydrogen, unfinished oils, finished aviation gasoline, special naphthas, wax, petroleum coke, still gas, petrochemical feedstocks and miscellaneous products.

Source: Energy Information Administration (EIA), Form EIA-820, "Biennial Refinery Report."

**Table 44. Shell Storage Capacity<sup>a</sup> at Operable Refineries by PAD District  
as of January 1, 1997  
(Thousand Barrels)**

Commodity	PAD Districts					United States
	I	II	III	IV	V	
Crude Oil.....	25,945	25,430	88,463	4,080	39,073	182,991
Liquefied Petroleum Products.....	3,706	9,318	27,779	577	2,016	43,396
Propane/Propylene.....	1,001	4,556	11,298	181	203	17,239
Normal Butane/Butylene.....	2,705	4,762	16,481	396	1,813	26,157
Other Liquids.....	10,719	18,539	37,658	3,970	19,158	90,044
Oxygenates.....	2,654	1,091	4,239	143	3,729	11,856
Fuel Ethanol.....	0	95	48	117	0	260
Methanol.....	287	49	637	0	114	1,087
MTBE.....	2,257	947	3,203	26	3,615	10,048
Other Oxygenates <sup>b</sup> .....	110	0	351	0	0	461
Gasoline Blending Components.....	8,065	17,448	33,419	3,827	15,429	78,188
Petroleum Products.....	58,927	103,683	243,216	19,094	100,971	525,891
Finished Motor Gasoline.....	9,836	22,065	32,209	4,130	17,163	85,403
Reformulated.....	5,926	2,078	5,895	0	9,369	23,268
Oxygenated.....	146	1,253	468	235	0	2,102
Other Finished.....	3,764	18,734	25,846	3,895	7,794	60,033
Jet Fuel.....	2,438	4,567	13,400	817	7,718	28,940
Naphtha-Type.....	0	153	0	121	83	357
Kerosene-Type.....	2,438	4,414	13,400	696	7,635	28,583
Kerosene.....	207	1,524	3,466	295	292	5,784
Distillate Fuel Oil.....	11,490	20,563	30,229	3,589	11,957	77,828
0.05 percent sulfur and under.....	3,683	11,704	15,350	2,481	7,400	40,618
Greater than 0.05 percent sulfur.....	7,807	8,859	14,879	1,108	4,557	37,210
Residual Fuel Oil.....	4,225	5,147	14,836	1,190	8,238	33,636
Lubricants.....	2,945	2,374	15,357	0	2,247	22,923
Asphalt and Road Oil.....	4,476	12,105	6,471	4,357	4,933	32,342
Other Products <sup>c</sup> .....	23,310	35,338	127,248	4,716	48,423	239,035
Total.....	99,297	156,970	397,116	27,721	161,218	842,322

<sup>a</sup> The design capacity of the tank.

<sup>b</sup> Includes ethyl tertiary butyl ether (ETBE), tertiary amyl methyl ether (TAME), tertiary butyl alcohol (TBA), and other aliphatic alcohols and ethers intended for motor gasoline blending (e.g., isopropyl ether (IPE) or n-propanol).

<sup>c</sup> Includes ethane/ethylene, isobutane/isobutylene, pentanes plus, other hydrocarbons/hydrogen, unfinished oils, finished aviation gasoline, special naphthas, wax, petroleum coke, still gas, petrochemical feedstocks and miscellaneous products.

Source: Energy Information Administration (EIA), Form EIA-820, "Biennial Refinery Report."



**Table 45. Capacity and Fresh Feed Input to Selected Downstream Units at U.S. Refineries, 1995-1997**  
(Barrels per Calendar Day, Except Where Noted)

PAD District/Item	1995	1996	1997	1995	1996	1997
	PAD DISTRICT I			PAD DISTRICT II		
<b>Cokers</b>						
Capacity .....	76,700	NA	82,850	319,260	NA	339,700
Inputs.....	78,496	81,325	--	280,005	299,265	--
<b>Catalytic Crackers</b>						
Capacity .....	600,425	NA	574,600	1,203,205	NA	1,194,060
Inputs.....	598,381	550,672	--	1,117,504	1,108,680	--
<b>Hydrocrackers</b>						
Capacity .....	75,200	NA	31,300	135,700	NA	134,400
Inputs.....	66,471	56,270	--	129,345	133,667	--
	PAD DISTRICT III			PAD DISTRICT IV		
<b>Cokers</b>						
Capacity .....	714,900	NA	796,718	36,000	NA	36,200
Inputs .....	723,882	778,292	--	33,992	35,964	--
<b>Catalytic Crackers</b>						
Capacity .....	2,511,306	NA	2,611,931	166,427	NA	168,955
Inputs .....	2,326,238	2,441,776	--	147,112	148,574	--
<b>Hydrocrackers</b>						
Capacity .....	572,800	NA	619,900	7,900	NA	8,000
Inputs .....	470,438	481,921	--	3,340	4,298	--
	PAD DISTRICT V			U.S. TOTAL		
<b>Cokers</b>						
Capacity.....	530,283	NA	483,927	1,677,143	NA	1,739,395
Inputs.....	457,773	458,899	--	1,574,148	1,653,746	--
<b>Catalytic Crackers</b>						
Capacity.....	788,250	NA	749,000	5,269,613	NA	5,298,546
Inputs.....	691,151	693,773	--	4,880,386	4,943,475	--
<b>Hydrocrackers</b>						
Capacity.....	436,560	NA	436,488	1,228,160	NA	1,230,088
Inputs.....	413,995	428,948	--	1,083,589	1,105,104	--

NA=Not available; the Form EIA-820 "Biennial Refinery Report" data were not collected for January 1, 1996.

Note: Capacities are as of January 1 of the indicated year.

Sources: Capacities are from the Energy Information Administration Form EIA-820, "Biennial Refinery Report." Inputs are from the Energy Information Administration Form EIA-810, "Monthly Refinery Report."

**Table 46. Refinery Receipts of Crude Oil by Method of Transportation by PAD District, 1996**  
(Thousand Barrels)

Method	PAD Districts					United States
	I	II	III	IV	V	
Pipeline						
Domestic .....	1,916	662,028	737,441	114,599	333,851	1,849,835
Foreign .....	22,444	518,271	302,731	41,804	37,758	923,008
Tanker						
Domestic .....	0	0	15,547	0	467,293	482,840
Foreign .....	451,431	0	1,258,019	0	104,526	1,813,976
Barge						
Domestic .....	1,612	363	76,969	0	4,820	83,764
Foreign .....	0	0	9,955	0	1,689	11,644
Tank Cars						
Domestic .....	4,590	0	1,396	54	0	6,040
Foreign .....	0	0	0	0	0	0
Trucks						
Domestic .....	4,249	11,266	30,039	14,936	9,002	69,492
Foreign .....	0	0	0	0	0	0
Total						
Domestic .....	12,367	673,657	861,392	129,589	814,966	2,491,971
Foreign .....	473,875	518,271	1,570,705	41,804	143,973	2,748,628

Source: Energy Information Administration (EIA), Form EIA-820, "Biennial Refinery Report."



**Table 47. Fuel Consumed at Refineries by PAD District, 1995 and 1996**  
(Thousand Barrels, Except Where Noted)

Commodity	PAD Districts					United States
	I	II	III	IV	V	
1995						
Crude Oil .....	0	0	1	0	4	5
Liquefied Petroleum Gases .....	477	1,506	759	51	4,187	6,980
Distillate Fuel Oil .....	534	149	69	2	251	1,005
Residual Fuel Oil .....	3,170	2,943	988	445	1,059	8,605
Still Gas .....	20,079	46,142	108,611	7,362	46,064	228,258
Marketable Petroleum Coke .....	1,351	22	88	133	1,519	3,113
Catalyst Petroleum Coke .....	11,215	17,857	37,271	2,162	12,842	81,347
Other Products <sup>a</sup> .....	422	1,463	4,697	830	1,200	8,612
1996						
Crude Oil .....	0	0	0	0	2	2
Liquefied Petroleum Gases .....	278	1,496	676	35	2,454	4,939
Distillate Fuel Oil .....	242	128	103	1	259	733
Residual Fuel Oil .....	3,019	3,206	1,035	444	1,014	8,718
Still Gas .....	18,380	46,801	116,863	6,904	50,207	239,155
Marketable Petroleum Coke .....	1,486	0	83	133	1,532	3,234
Catalyst Petroleum Coke .....	10,355	17,757	40,255	2,309	13,458	84,134
Natural Gas (million cubic feet) .....	36,878	95,941	519,776	18,252	103,477	774,324
Coal (thousand short tons) .....	124	16	0	0	0	140
Purchased Electricity (million kWh) .....	2,896	8,878	14,401	1,385	4,571	32,131
Purchased Steam (million pounds) .....	3,936	3,955	14,340	3,178	11,036	36,445
Hydrogen (million cubic feet) .....	0	0	0	0	0	0
Other Products <sup>a</sup> .....	83	1,434	2,946	712	985	6,160

Note: Includes volumes used as fuel at refineries and all nonprocessing losses of crude oil and petroleum products (e.g., spills, fire losses, contamination, etc.)

<sup>a</sup>Includes miscellaneous products; finished motor gasoline; pentanes plus; unfinished oils, other hydrocarbons, hydrogen, and oxygenates; asphalt and road oil, motor gasoline blending components; lubricants; naphtha <401 degrees F; wax; jet fuel; and aviation gasoline.

Sources: 1995: Energy Information Administration (EIA), Form EIA-810, "Monthly Refinery Report." 1996: Form EIA-820, "Biennial Refinery Report" and Form EIA-810.

Table 48. Shutdown and Reactivated Refineries During 1995 and 1996

PAD District / Refinery	Location	Total Atmospheric Crude Oil Distillation Capacity (bbl/cd)	Total Downstream Charge Capacity (bbl/sd)	Date Operable	Date of Last Operation	Date Shutdown
SHUTDOWNS						
PAD District I		172,000	340,000			
Tosco (formerly BP Oil)	Marcus Hook, PA	172,000	340,000	(a)	01/96	02/96
PAD District II		165,850	177,840			
Barrett Refg. Corp.	Custer, OK	10,500	0	01/80	01/96	01/96
Cyril Petrochemical Corp.	Cyril, OK	7,500	0	01/94	05/95	12/95
Indian Refining	Lawrenceville, IL	80,750	103,000	08/90	09/95	10/95
Laketon Refg.	Laketon, IN	11,100	0	01/57	06/95	01/96
Total Petroleum, Inc.	Arkansas City, KS	56,000	74,840	a	08/96	09/96
PAD District III		15,350	6,700			
Arcadia Refg. & Mktg.	Lisbon, LA	7,350	6,700	01/72	01/96	02/96
Barrett Refg. Corp.	Vicksburg, MS	8,000	0	01/79	06/95	06/96
PAD District V		62,300	104,950			
Intermountain Refg. Co.	Fredonia, AZ	3,800	2,000	02/92	01/94	05/96
Powerine Oil Co.	Santa Fe Springs, CA	46,500	100,300	01/87	06/95	09/95
Sunland Refining Corp.	Bakersfield, CA	12,000	2,650	a	03/95	12/95
Total U.S. Shutdowns		415,500	629,490			
PAD District VI						
Caribbean Petroleum Corp.	San Juan, Puerto Rico	45,000	60,500	11/89	05/95	05/95
REACTIVATION						
PAD District V						
Santa Maria Refg. Co. (Formerly Conoco)	Santa Maria, CA	9,500	5,700	05/95	-----	-----
OTHER						
PAD District III						
Southwestern Refg. Co., Inc. <sup>b</sup>	Corpus Christi, TX	104,000	201,000	a	-----	-----

<sup>a</sup> Refinery was operable prior to 1948.  
<sup>b</sup> This facility was sold to Koch Refg. Co. and is being operated with Koch's existing Corpus Christi refinery.  
bbl/cd=Barrels per calendar day.  
bbl/sd=Barrels per stream day.  
Source: Energy Information Administration (EIA) Form EIA-810, "Monthly Refinery Report."



**Table 49. Refinery Sales During 1995 and 1996**

Former Owner	Total Atmospheric Crude Oil Distillation Capacity (bbl/cd)	New Owner	Date of Sale
<b>BP</b> Marcus Hook, PA (shutdown in 1996)	172,000	<b>Tosco</b>	02/96
<b>Gary-Williams, Co.</b> <b>Bloomfield Refining Co</b> Bloomfield, NM	16,800	<b>Giant Industries, Inc.</b>	10/95
<b>Kerr-McGee Corp.</b> Wynnewood, OK	43,000	<b>Gary-Williams, Co.</b> Wynnewood Refining Co.	08/95
<b>Kerr-McGee Corp.</b> Cotton Valley, LA	7,800	<b>Calumet Lubricants Co., LP</b>	04/95
<b>Kerr-McGee Corp.</b> <b>Southwestern Refining</b> Corpus Christi, TX	104,000	<b>Koch Industries Inc.</b>	08/95
<b>LL &amp; E Petroleum Mktg. Inc.</b> Saraland (Mobile), AL	75,000	<b>Shell Chemical</b>	08/96
<b>Saint Rose Refining, Inc.</b> St. Rose, LA	40,000	<b>Shell Chemical Company</b>	08/95

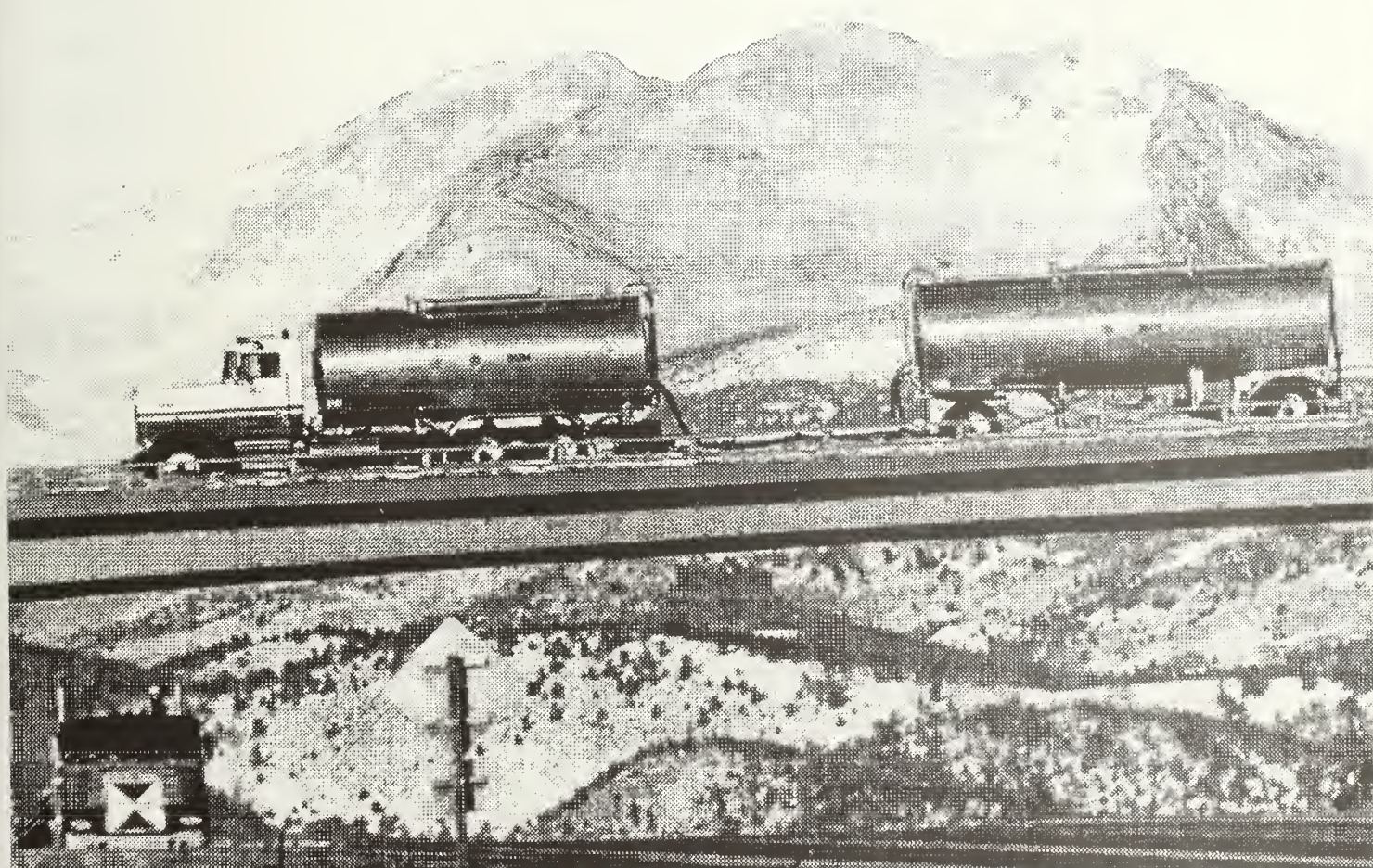
bbl/cd = Barrels per calendar day.

Source: Energy Information Administration (EIA) Form EIA-810, "Monthly Refinery Report."



## Appendix A

### District Descriptions and Maps



*Tank trucks are used to distribute heating oil to remote areas.*





## District Descriptions and Maps

The following are the Refining Districts which make up the Petroleum Administration for Defense (PAD) Districts.

### PAD District I

**East Coast:** District of Columbia and the States of Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New Jersey, Delaware, Maryland, Virginia, North Carolina, South Carolina, Georgia, Florida, and the following counties of the State of New York: Cayuga, Tompkins, Chemung, and all counties east and north thereof. Also the following counties in the State of Pennsylvania: Bradford, Sullivan, Columbia, Montour, Northumberland, Dauphin, York, and all counties east thereof.

**Appalachian No. 1:** The State of West Virginia and those parts of the States of Pennsylvania and New York not included in the East Coast District.

### Sub-PAD District I

**New England:** The States of Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island and Vermont.

**Central Atlantic:** The District of Columbia and the States of Delaware, Maryland, New Jersey, New York, and Pennsylvania.

**Lower Atlantic:** The States of Florida, Georgia, North Carolina, South Carolina, Virginia and West Virginia.

### PAD District II

**Indiana-Illinois-Kentucky:** The States of Indiana, Illinois, Kentucky, Tennessee, Michigan, and Ohio.

**Minnesota-Wisconsin-North and South Dakota:** The States of Minnesota, Wisconsin, North Dakota, and South Dakota.

**Oklahoma-Kansas-Missouri:** The States of Oklahoma, Kansas, Missouri, Nebraska, and Iowa.

### PAD District III

**Texas Inland:** The State of Texas except the Texas Gulf Coast District.

**Texas Gulf Coast:** The following counties of the State of Texas: Newton, Orange, Jefferson, Jasper, Tyler, Hardin, Liberty, Chambers, Polk, San Jacinto, Montgomery, Harris, Galveston, Waller, Fort Bend, Brazoria, Wharton, Matagorda, Jackson, Victoria, Calhoun, Refugio, Aransas, San Patricio, Nueces, Kleberg, Kenedy, Willacy, and Cameron.

**Louisiana Gulf Coast:** The following Parishes of the State of Louisiana: Vernon, Rapides, Avoyelles, Pointe Coupee, West Feliciana, East Feliciana, Saint Helena, Tangipahoa, Washington, and all Parishes south thereof. Also the following counties of the State of Mississippi: Pearl River, Stone, George, Hancock, Harrison, and Jackson. Also the following counties of the State of Alabama: Mobile and Baldwin.

**North Louisiana-Arkansas:** The State of Arkansas and those parts of the States of Louisiana, Mississippi, and Alabama not included in the Louisiana Gulf Coast District.

**New Mexico:** The State of New Mexico.

### PAD District IV

**Rocky Mountain:** The States of Montana, Idaho, Wyoming, Utah, and Colorado.

### PAD District V

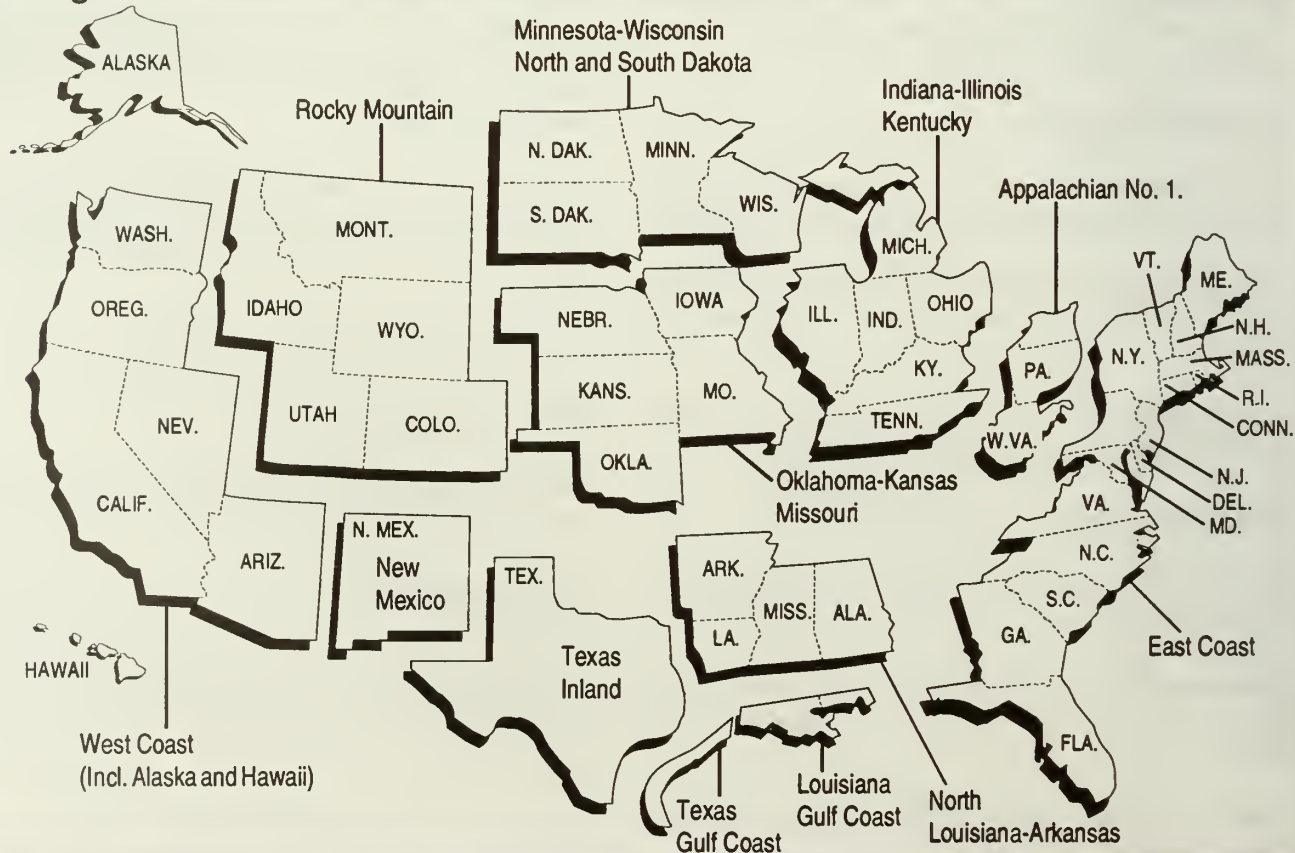
**West Coast:** The States of Washington, Oregon, California, Nevada, Arizona, Alaska, and Hawaii.



## Petroleum Administration for Defense (PAD) Districts



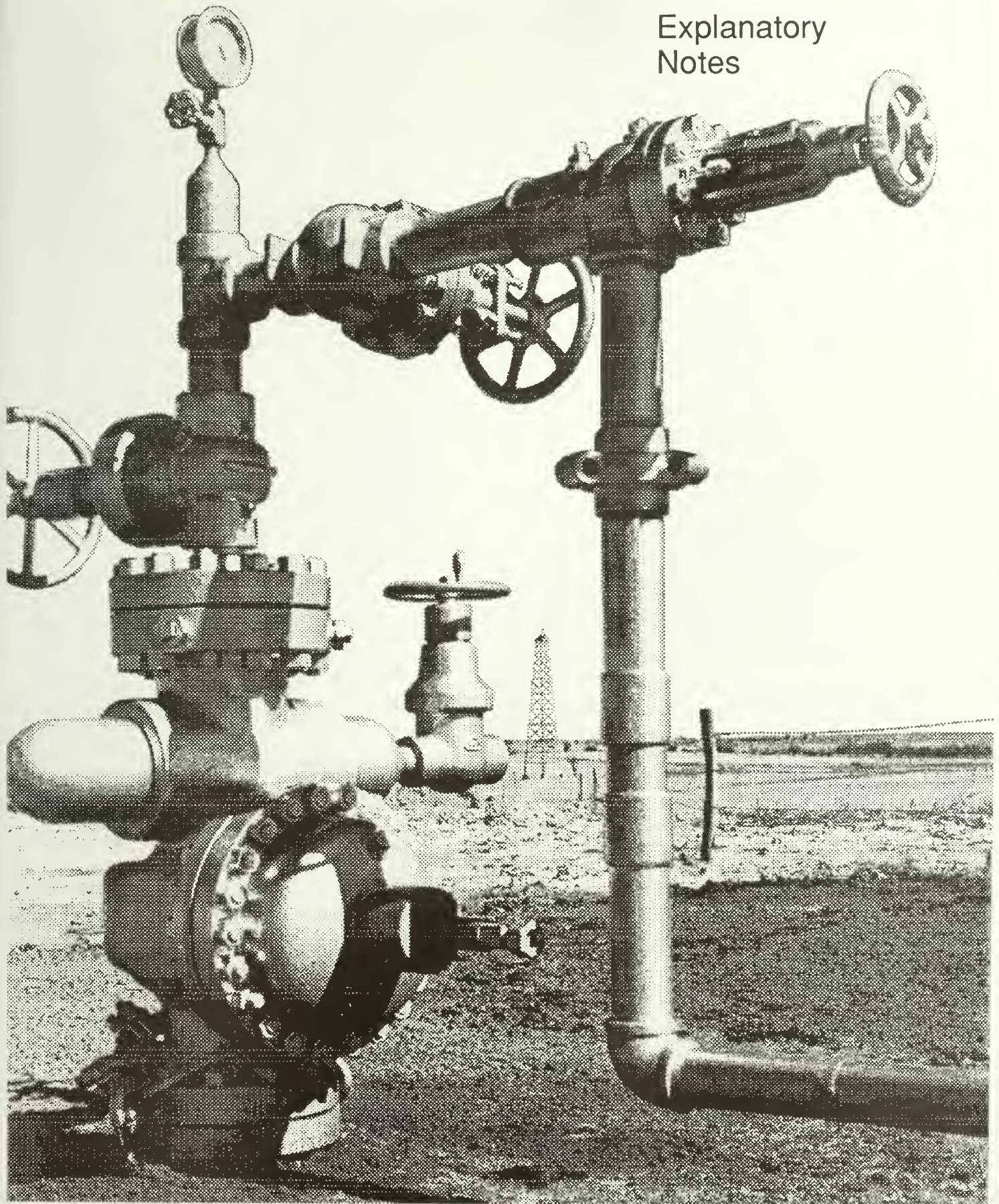
## Refining Districts





## Appendix B

### Explanatory Notes



*The cluster of pipes and valves that control the flow of oil at the mouth of an oil well is what oilmen call a "Christmas Tree."*





## Explanatory Notes

The following Explanatory Notes are provided to assist in understanding and interpreting the data presented in this publication.

- Note 1. Petroleum Supply Reporting System
- Note 2. Monthly Petroleum Supply Reporting System
- Note 3. Form EIA-820: Biennial Refinery Report
- Note 4. Technical Notes for Detailed Statistics Tables
- Note 5. Domestic Crude Oil Production
- Note 6. Export Data
- Note 7. Quality Control and Data Revision
- Note 8. Frames Maintenance
- Note 9. Descriptive Monthly Statistics
- Note 10. Practical Limitations of Data Collection Efforts
- Note 11. 1981 Changes in the Petroleum Supply Reporting System
- Note 12. 1983 Changes in the Petroleum Supply Reporting System
- Note 13. 1984 Changes in the Petroleum Supply Reporting System
- Note 14. 1985 Changes in the Petroleum Supply Reporting System
- Note 15. 1986 Changes in the Petroleum Supply Reporting System
- Note 16. 1987 Changes in the Petroleum Supply Reporting System
- Note 17. 1989 Changes in the Petroleum Supply Reporting System
- Note 18. 1990 Changes in the Petroleum Supply Reporting System
- Note 19. 1993 Changes in the Petroleum Supply Reporting System
- Note 20. 1994 Changes in the Petroleum Supply Reporting System
- Note 21. 1995 Changes in the Petroleum Supply Reporting System
- Note 22. Motor Gasoline Blending Plants

### Note 1. Petroleum Supply Reporting System

The Petroleum Supply Reporting System (PSRS) represents a family of data collection survey forms, data

processing systems, and publication systems that have been consolidated to achieve comparability and consistency throughout. The survey forms that comprise the PSRS are:

Form Number	Name
EIA-800	"Weekly Refinery Report"
EIA-801	"Weekly Bulk Terminal Report"
EIA-802	"Weekly Product Pipeline Report"
EIA-803	"Weekly Crude Oil Stocks Report"
EIA-804	"Weekly Imports Report"
EIA-807	"Propane Telephone Survey"
EIA-810	"Monthly Refinery Report"
EIA-811	"Monthly Bulk Terminal Report"
EIA-812	"Monthly Product Pipeline Report"
EIA-813	"Monthly Crude Oil Report"
EIA-814	"Monthly Imports Report"
EIA-816	"Monthly Natural Gas Liquids Report"
EIA-817	"Monthly Tanker and Barge Movement Report"
EIA -819M	"Monthly Oxygenate Telephone Report"
EIA-820	"Biennial Refinery Report"

Forms EIA-800 through 804 comprise the Weekly Petroleum Supply Reporting System (WPSRS). A sample of all petroleum companies report weekly data to the Energy Information Administration (EIA) on crude oil and petroleum product stocks, refinery inputs and production, and crude oil and petroleum product imports. The sample of companies that report weekly is selected from the universe of companies that report on the comparable monthly surveys. Data collected from the WPSRS are used to develop estimates of the most current monthly quantities in the Summary Statistics section of the *Petroleum Supply Monthly* (PSM) and which appear in the *Weekly Petroleum Status Report* (WPSR).

The Form EIA-807, "Propane Telephone Survey," is used to collect data on production, stocks, and imports of propane. These data are used to monitor the supply of propane and to report to the Congress and others on supplies when requested. Data are collected from a sample of respondents reporting on the Monthly Petroleum Supply



Reporting System (MPSRS) surveys. Data are collected on a weekly basis during the heating season (October through March) and published in the *Winter Fuels Report*. During the non-heating season (April through September) data are collected on end-of-month stocks only. These data are published in the *WPSR*.

Forms EIA-810 through 814, 816, and 817 comprise the MPSRS. These surveys are used to collect detailed refinery/blender and natural gas plant operations data; refinery/blender, bulk terminal, oxygenate plant, natural gas plant and pipeline stocks data; crude oil and petroleum product imports data; and data on movements of petroleum products and crude oil between Petroleum Administration for Defense (PAD) Districts. A description of the MPSRS forms follows in Explanatory Note 2.

Data from these surveys are published in preliminary form in the *PSM*. They are published in final form in the *Petroleum Supply Annual* (PSA), Volumes 1 and 2.

Summary information on the revision error between preliminary and final data is published once a year in the *PSM* feature article entitled, "Timeliness and Accuracy of Petroleum Supply Data." The last article was published in the September 1996 issue and evaluated the accuracy of the data for 1995 compared with previous years.

The Form EIA-819M, "Monthly Oxygenate Telephone Report," is used to collect preliminary data on production and stocks of oxygenates by PAD District. These data are used to monitor the supply of oxygenates. Data are collected from a sample of respondents reporting on the MPSRS surveys and from a sample of fuel ethanol producers. Data are published in Appendix D of the *PSM* and also in the *WPSR*.

The Form EIA-819A, "Annual Oxygenate Capacity Report," was used to collect data on current and projected production capacity of oxygenates and annual production and end-of-year inventories of fuel ethanol. This survey, which was last conducted for January 1, 1995 and published in the *Petroleum Supply Annual* 1994, has been eliminated.

The Form EIA-820, "Biennial Refinery Report," is used to collect data on refinery fuel use and consumption of steam and electricity, refinery receipts of crude oil by method of transportation, operable capacity for atmospheric crude oil distillation units and downstream units, as well as production capacity and storage capacity for petroleum products. In 1996, this survey was moved to a biennial schedule (every other year). Therefore, the survey was not conducted in January 1996. This survey is described in more detail in Explanatory Note 3.

## Note 2. Monthly Petroleum Supply Reporting System

The Monthly Petroleum Supply Reporting System (MPSRS) was implemented in January 1983 as the result of an extensive effort by the Energy Information Administration (EIA) to integrate the collection and processing of petroleum supply data that had been collected on other survey forms for many years. The collection of monthly petroleum supply statistics began as early as 1918 when the U.S. Bureau of Mines began collecting data on refinery operations and crude oil stocks and movements. The collection systems were further expanded in 1925 to include natural gas plant liquids production and storage, imports of crude oil and petroleum products and storage and movement of petroleum products in 1959, and tanker and barge movements of crude oil and petroleum products in 1964. Since their inception, each survey has undergone numerous changes, but the MPSRS was the first effort to make them all consistent and comparable. The forms that comprise the MPSRS are:

Form Number	Name
EIA-810	"Monthly Refinery Report"
EIA-811	"Monthly Bulk Terminal Report"
EIA-812	"Monthly Product Pipeline Report"
EIA-813	"Monthly Crude Oil Report"
EIA-814	"Monthly Imports Report"
EIA-816	"Monthly Natural Gas Liquids Report"
EIA-817	"Monthly Tanker and Barge Movement Report"
EIA-819M	"Monthly Oxygenate Telephone Report"

### Respondent Frame

Form EIA-810, "Monthly Refinery Report" - Operators of all operating and idle petroleum refineries and blending plants located in the 50 States, the District of Columbia, Puerto Rico, the Virgin Islands, Guam and other U.S. possessions. Approximately 260 respondents report on the Form EIA-810.

Form EIA-811, "Monthly Bulk Terminal Report" - Every bulk terminal operating company located in the 50 States, the District of Columbia, Puerto Rico, the Virgin Islands, and other U.S. possessions. A bulk terminal is primarily used for storage and/or marketing of petroleum products and has a total bulk storage capacity of 50,000 barrels or more, and/or receives petroleum products by tanker, barge, or pipeline. Bulk terminal facilities associated with a product pipeline are included. Approximately 315 respondents report on the Form EIA-811.

Form EIA-812, "Monthly Product Pipeline Report" - All product pipeline companies that carry petroleum products (including interstate, intrastate, and intracompany pipelines) in the 50 States and the District of Columbia. Approximately 80 respondents report on the Form EIA-812.

Form EIA-813, "Monthly Crude Oil Report" - All companies which carry or store 1,000 barrels or more of crude oil. Included in this survey are gathering and trunk pipeline companies (including interstate, intrastate, and intracompany pipelines), crude oil producers, terminal operators, storers of crude oil (except refineries), and companies transporting Alaskan crude oil by water in the 50 States and the District of Columbia. Approximately 175 respondents report on the Form EIA-813.

Form EIA-814, "Monthly Imports Report" - All companies, including subsidiary or affiliated companies, that import crude oil or petroleum products (1) into the 50 States and the District of Columbia, (2) into Puerto Rico, the Virgin Islands and other U.S. possessions (Guam, Midway Islands, Wake Island, American Samoa, and Northern Mariana Islands), and (3) from Puerto Rico, the Virgin Islands and other U.S. possessions into the 50 States and the District of Columbia. Imports into Foreign Trade Zones located in the 50 States and the District of Columbia are considered imports into the 50 States and the District of Columbia and must be reported. A report is required only if there has been an import during the month unless the importer has been selected as part of a sample to report every month regardless of activity. Approximately 200 respondents report on the Form EIA-814.

Form EIA-816, "Monthly Natural Gas Liquids Report" - Operators of all facilities that extract liquid hydrocarbons from a natural gas stream (natural gas processing plant) and/or separate a liquid hydrocarbon stream into its component products (fractionator). Approximately 560 respondents report on the Form EIA-816.

Form EIA-817, "Monthly Tanker and Barge Movement Report" - All companies that have custody of crude oil or petroleum products transported by tanker or barge between Petroleum Administration for Defense (PAD) Districts or between the Panama Canal and the United States. For purposes of this report, custody is defined as physical possession of crude oil or petroleum products on a company-owned tanker or barge. Also, companies which lease vessels or contract for the movement of crude oil or petroleum products on a tanker or barge between PAD Districts or between the Panama Canal and the United States are considered to have custody. Approximately 45 respondents report on the Form EIA-817.

Form EIA-819M, "Monthly Oxygenate Telephone Report" - The sample of companies that report on the EIA-819M are selected from the universe of companies that report on the MPSRS surveys and from the universe of fuel ethanol producers who reported on the Form EIA-819A, "Annual Oxygenate Capacity Report", in 1995. The universe consists of (1) operators of facilities that produce (manufacture or distill) oxygenates (including MTBE plants, petrochemical plants, and refineries that produce oxygenates as part of their operations); (2) operators of petroleum refineries; (3) operators of bulk terminals, bulk stations, blending plants, and other non-refinery facilities that store and/or blend oxygenates; and (4) importers of oxygenates (importer of record) located in or importing oxygenates into the 50 States and the District of Columbia. Approximately 80 respondents report on the Form EIA-819M.

### Sampling

The sampling procedure used for the survey Form EIA-819M is the cut-off method and is performed using software developed for EIA's Survey Methods Group. In the cut-off method, companies are ranked from largest to smallest on the basis of quantities reported (oxygenate production, oxygenate stocks, and oxygenate imports) during the previous year. Companies are chosen for the sample beginning with the largest and adding companies until the sample covers approximately 90 percent of the total for each oxygenate product and supply type by geographic region (PAD Districts I through V).

### Description of Survey Forms

The Form EIA-810, "Monthly Refinery Report," is used to collect data on refinery input and capacity, sulfur content and API gravity of crude oil, and data on supply (beginning stocks, receipts, and production) and disposition (inputs, shipments, fuel use and losses, and ending stocks) of crude oil and refined products.

The Form EIA-811, "Monthly Bulk Terminal Report," is used to collect data on end-of-month stock levels of finished petroleum products by State in the custody of the bulk terminal company regardless of ownership. Leased tankage at other facilities is excluded. All domestic and foreign stocks held at bulk terminals and in-transit thereto, except those in-transit by pipeline are included. Petroleum products in-transit by pipeline are reported by pipeline operators on Form EIA-812, "Monthly Product Pipeline Report."

The Form EIA-812, "Monthly Product Pipeline Report," is used to collect data on end-of-month stock levels and movements of petroleum products transported by



pipeline. Intermediate movements for pipeline systems operating in more than two PAD Districts are included.

The Form EIA-813, "Monthly Crude Oil Report," is used to collect data on end-of-month stocks of crude oil held at pipeline and tank farms (associated with the pipelines) and terminals operated by the reporting company. Also, crude oil consumed by pipelines and on leases as pump fuel, boiler fuel, etc., is reported. Data are reported on a PAD District basis.

Total Alaskan crude oil stocks in-transit by water (including stocks held at transshipment terminals between Alaska and the continental United States) to the 50 States, the District of Columbia, Puerto Rico, and the Virgin Islands are also reported by the transporting company having custody of the stocks.

Inter-PAD District movements of crude oil by pipeline are collected by the shipping and receiving PAD District. Intermediate movements for pipeline systems operating in more than two PAD Districts are not included.

The Form EIA-814, "Monthly Imports Report," is used to collect data on imports of crude oil and petroleum products (1) into the 50 States and the District of Columbia, (2) into Puerto Rico, the Virgin Islands, and other U.S. possessions (Guam, Midway Islands, Wake Island, American Samoa, and Northern Mariana Islands), and (3) from Puerto Rico, the Virgin Islands, and other U.S. possessions into the 50 States and the District of Columbia. Imports into Foreign Trade Zones located in the 50 States and the District of Columbia are considered imports into the 50 States and the District of Columbia.

The type of commodity, port of entry, country of origin, quantity (thousand barrels), sulfur percent by weight, API gravity, and name and location of the processing or storage facility are reported. Sulfur percent by weight is requested for crude oil, crude oil burned as fuel, and residual fuel oil only. API gravity is requested for crude oil only. The name and location of the processing or storage facility is requested for crude oil, unfinished oils, other hydrocarbons/hydrogen/oxygenates, and blending components only.

The Form EIA-816, "Monthly Natural Gas Liquids Report," is used to collect data on the operations of natural gas processing plants and fractionators. Beginning and end-of-month stocks, receipts, inputs, production, shipments, and plant fuel use and losses during the month are collected from operators of natural gas processing plants. End-of-month stocks are collected from fractionators.

The Form EIA-817, "Monthly Tanker and Barge Movement Report," is used to collect data on the movements of

crude oil and petroleum products between PAD Districts. Data are reported by shipping and receiving PAD District and sub-PAD District. Shipments to and from the Panama Canal are also included if the shipment was delivered to the Canal.

The Form EIA-819M, "Monthly Oxygenate Telephone Report," is used to collect data on production, stocks, and imports of oxygenates. Data on end-of-month stocks are reported on a custody basis regardless of ownership. Data are reported on a PAD District basis.

### **Collection Methods**

Except for the EIA-819M, survey forms for the MPSRS can be submitted by mail, facsimile, or electronic transmission. Completed forms are required to be postmarked by the 20th calendar day following the end of the report month. Data collection for the EIA-819M begins on the seventh working day of each month. Data are solicited by telephone or transmitted to the EIA by facsimile. Receipt of the reports are monitored using an automated respondent mailing list. Telephone follow-up calls are made to nonrespondents prior to the publication deadline.

### **Response Rate**

The response rate is generally 98 to 100 percent. Chronic nonrespondents and late filing respondents are contacted in writing and reminded of their requirement to report. Companies that file late or fail to file are subject to criminal fines, civil penalties, and other sanctions as provided by Section 13(i) of the Federal Energy Administration (FEA) Act.

### **Data Imputation**

Imputation is performed for companies that fail to file Forms EIA-810 through 813, 816, and 819M. For such companies, previous monthly values are used for current values. On the EIA-819M, data are aggregated for each geographic region. Estimation factors, which are derived from the previous year's data, are then applied to each cell to generate published estimates. Data for nonrespondents on the Forms EIA-814 and 817 are not imputed because these data series, by respondent, are highly variable.

### **Confidentiality**

The Office of Legal Counsel of the Department of Justice concluded on March 20, 1991, that the Federal Energy Administration Act requires the Energy Information Administration to provide company-specific data to the Department of Justice, or to any Federal agency when requested for official use, which may include enforcement of Federal law. The information contained on this form

may also be made available, upon request, to another component of the Department of Energy (DOE), to any Committee of Congress, the General Accounting Office, or other Congressional agencies authorized by law to receive such information. A court of competent jurisdiction may obtain this information in response to an order.

The information contained on Forms EIA-810 through 813, 816, 817, and 819M are kept confidential and not disclosed to the public to the extent that they satisfy the criteria for exemption under the Freedom of Information Act (FOIA), 5 U.S.C. 552, the Department of Energy (DOE) regulations, 10 C.F.R. 1004.11, implementing the FOIA, and the Trade Secrets Act, 18 U.S.C. 1905. The information contained on Form EIA-814 are not considered confidential and historically has not been treated as such.

Upon receipt of a request for this information under the FOIA, the DOE shall make a final determination whether the information is exempt from disclosure in accordance with the procedures and criteria provided in the regulations. To assist us in this determination, respondents should demonstrate to the DOE that, for example, their information contains trade secrets or commercial or financial information whose release would be likely to cause substantial harm to their company's competitive position. A letter accompanying the submission that explains (on an element-by-element basis) the reasons why the information would be likely to cause the respondent substantial competitive harm if released to the public would aid in this determination. A new justification does not need to be provided each time information is submitted on the form, if the company has previously submitted a justification for that information and the justification has not changed. Company specific data are also provided to other DOE offices for the purpose of examining operations in the context of emergency response planning and actual emergencies.

The data collected on Forms EIA-810 through 814, 816, and 817 appear in EIA publications such as *Petroleum Supply Monthly* (PSM), *Monthly Energy Review*, *Petroleum Supply Annual* (PSA), and the *Annual Energy Review*.

Data on the breakdown between liquefied refinery gases and olefins and lubricants are suppressed on Table 16, "Refinery Net Production of Finished Petroleum Products by PAD and Refining Districts" to avoid disclosure of company identifiable data.

Statistics representing data aggregated from less than three companies or aggregated data representing 60 percent or more of a single company's data are suppressed on

the PSA tables listed below. In addition, complementary suppression is performed to avoid any residual disclosure.

- Table 16, "Refinery Input of Crude Oil and Petroleum Products by PAD and Refining Districts," (inputs of oxygenates)
- Table 18, "Refinery Stocks of Crude Oil and Petroleum Products by PAD and Refining Districts," (stocks of oxygenates)
- Table 30, "Stocks of Crude Oil and Petroleum Products by PAD District," (stocks of oxygenates)
- Table 31, "Refinery, Bulk Terminal, and Natural Gas Plant Stocks of Selected Petroleum Products," (all products)

With the exception of the tables listed above, the tables in the PSA are not subject to statistical nondisclosure procedures. Thus, there may be some table cells which are based on data from only one or two respondents, or which are dominated by data from one or two large respondents. In these cases, it may be possible for a knowledgeable user of the data to make inferences about the data reported by a specific respondent.

### Note 3. Form EIA-820: Biennial Refinery Report

Refinery capacity data collection was begun in 1918 by the Bureau of Mines, then in the Department of Commerce, and was operated on a voluntary basis until 1980. In 1980, the mandatory Energy Information Administration (EIA) Form EIA-177, *Capacity of Petroleum Refineries*, was implemented. Information on refining capacity was expanded to include not only current year operations, two-year projections, and refinery input/production data. Working storage capacity data was also added to the form and product categories were added for total coverage. Information on refinery downstream facilities was expanded to include a breakdown of thermal operations and to add vacuum distillation, catalytic hydrotreating and hydrorefining. Production capacity was also added to include information on isomerization, alkylation, aromatics, asphalt/road oil, coking, lubricants and hydrogen.

In 1983, the form was revised to improve the consistency and quality of the data collected by the EIA and redesignated as Form EIA-820, "Annual Refinery Report." Two sections for data previously reported monthly were added: (1) refinery receipts of crude oil by method of transportation, and (2) fuels consumed for all purposes at refineries. Also, the second year projections on refining capacity were eliminated. As a result of a study conducted by the EIA evaluating motor gasoline data collected by the Federal Highway Administration (FHWA) and by the EIA, motor gasoline blending plants were included for the



first time to the respondent frame in order to produce more accurate statistics on the production of motor gasoline.

In 1987, the form was revised to reduce respondent burden and to better reflect current refinery operations through updated terminology. Information on projected input/production of refinery processing facilities was deleted. Several categories under catalytic hydrotreating were combined: naphtha and reformer feeds were combined into a single category as well as residual fuel oil and other. Thermal cracking types, gas oil and "other" were also combined into a single category. Catalytic reforming types, conventional and bi-metallic were replaced with low and high pressure processing units. Two new categories were added: fuels solvent deasphalting was added to downstream charge capacity and sulfur recovery was added to production capacity.

In 1994, the form was revised to enable EIA to calculate utilization rates for certain downstream processing units and to reflect storage capacity of fuels mandated by the Clean Air Act Amendments of 1990. Additions to the form included calendar day downstream charge capacity for fluid and delayed coking, catalytic cracking, and catalytic hydrocracking. Also storage capacity categories for reformulated, oxygenated, and other finished motor gasoline were added, as well as oxygenate storage

capacity and separate categories for high and low sulfur distillate fuel oil.

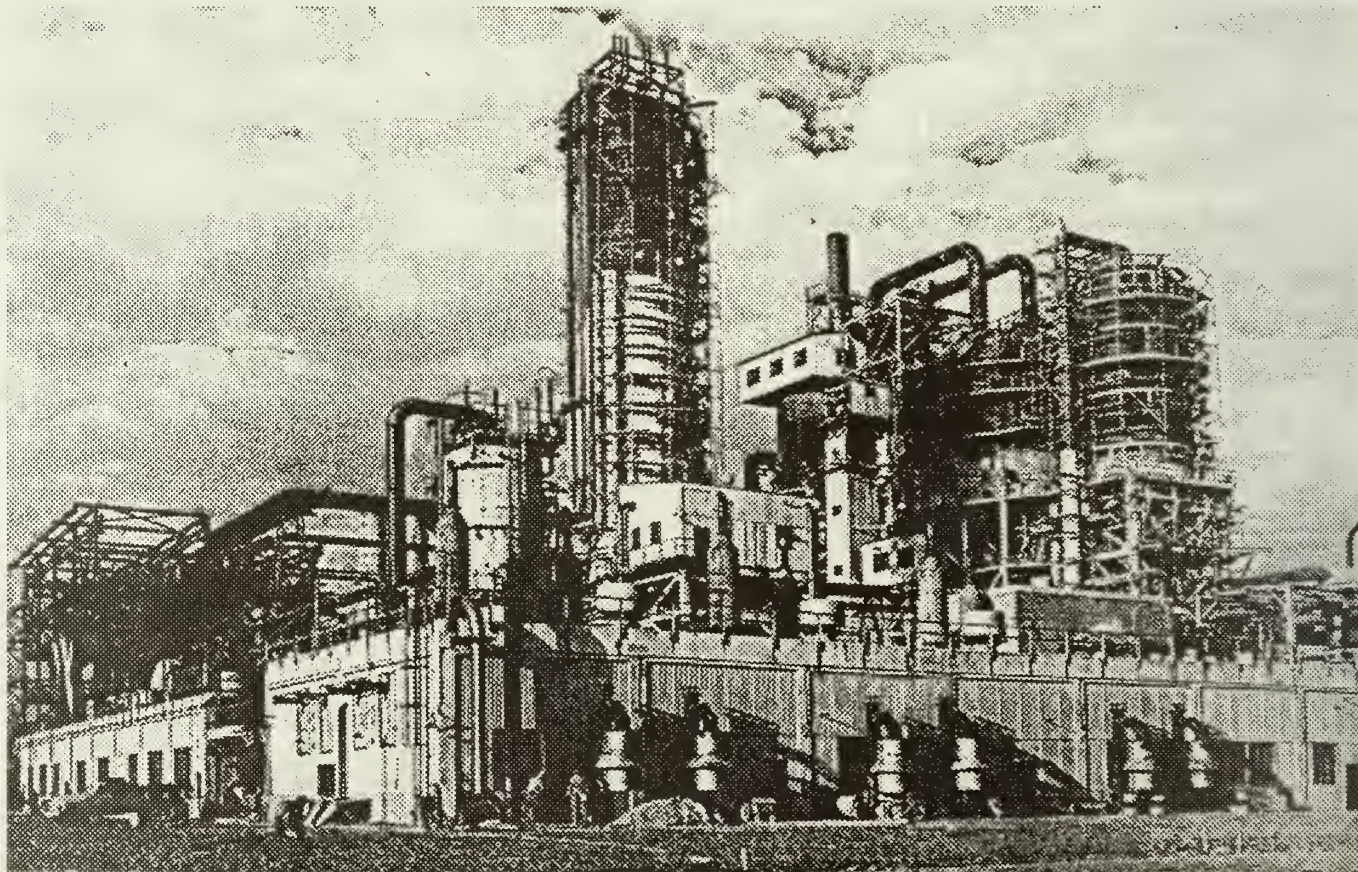
In 1995, motor gasoline blending plants were dropped from the survey frame, since by this time, the only section of the form that applied to them was working and shell storage capacity. Also in 1995, a decision was made to no longer collect storage capacity from shutdown refineries; therefore, these refineries were also eliminated from the survey frame.

In 1996, the survey was moved to a biennial schedule (every other year). Therefore the survey was not conducted for January 1, 1996 and was renamed "Biennial Refinery Report".

In 1997, respondents were not required to submit data for crude oil and petroleum products consumed at refineries during 1996. These data are available from the Form EIA-810, "Monthly Refinery Report." The requirement to submit data for refinery consumption of natural gas, coal, and purchased steam and electricity on the Form EIA-820 remains.

#### Respondent Frame

The respondent frame consists of all operating and idle petroleum refineries (including new refineries under con-



*Refinery cat-cracker.*



struction), located in the 50 States, the District of Columbia, Puerto Rico, the Virgin Islands, Guam and other U.S. possessions. As of January 1, 1997, there were 164 refineries and 52 motor gasoline blending plants in the 50 States. A list of motor gasoline blending plants operating during 1996 is provided in Explanatory Note 22.

The respondent frame is maintained by monitoring the monthly Form EIA-810, "Monthly Refinery Report," and industry publications for changes and developments in the petroleum industry such as refinery sales, mergers and new operations.

### **Description of Survey Form**

The Form EIA-820 is used to collect data on fuels consumed for all purposes at the refinery during the preceding year; refinery receipts of crude oil by method of transportation during the preceding year; current and next year projections for operable atmospheric crude oil distillation capacity, downstream charge capacity and production capacity; and current year working and shell storage capacity for crude oil and petroleum products at the refinery.

### **Collection Methods**

The Form EIA-820 is sent to respondents in December. Survey forms can be submitted by mail or facsimile. Completed forms are required to be postmarked by the 15th day of February of the current report year. Receipt of the reports is monitored using an automated respondent mailing list. Telephone follow-up calls are made to secure responses from those companies failing to report by February 15th.

### **Response Rate**

The response rate for the Form EIA-820 is normally very high. Data are estimated and non-compliance procedures are implemented for those companies still not reporting data by close-out for the report year. For the January 1, 1997 survey, there was one nonrespondent.

### **Data Imputation**

Imputation is performed for companies that fail to file prior to the publication deadline. For the January 1, 1997 survey, there was one nonrespondent, and their total operable capacity is estimated to be about 0.1 percent of the U.S. total. When nonresponse occurs, values for these companies are imputed from data reported on the previous year's Form EIA-820 and/or from data reported on Form EIA-810, "Monthly Refinery Report," for that company. For most surveyed items, the value imputed for nonrespondents is the value that company reported on the

Form EIA-820 for the previous year. For three categories of information however, the imputed value is also based on their data from the Form EIA-810 as follows:

#### **Section 1: Fuel, Electricity, and Steam Consumed for all Purposes at Refineries**

Data for crude oil, distillate and residual fuel oil, liquefied petroleum gases, still gas, and marketable and catalyst petroleum coke are based upon data reported on the monthly Form EIA-810.

Estimates for natural gas, coal, electricity and steam are taken directly from data reported on the previous year's annual Form EIA-820.

#### **Section 2: Refinery Receipts of Crude Oil by Method of Transportation**

The imputation methodology for this section is based on data reported on both the monthly Form EIA-810 and the annual Form EIA-820. Annual refinery receipts of domestic and foreign crude oil for a nonrespondent are imputed by aggregating the values for the refinery on the monthly survey. These values are allocated to the method of transportation by using the percentages reported for the refinery in the previous year. The difference between the values reported on the two surveys by all respondents in 1997 is about 2.0 percent.

#### **Section 3: Operable and Storage Capacity as of January 1**

Operable atmospheric crude oil distillation capacity in barrels per calendar day is collected on the monthly Form EIA-810 as of the first day of each month and on the annual Form EIA-820 as of January 1. As part of the editing process for the Form EIA-820, these two values are compared. Companies are contacted and any discrepancies are resolved by the time of publication. Imputed values for operable atmospheric crude oil distillation capacity in barrels per calendar day are taken directly from the January Form EIA-810. A barrels per stream day capacity is then derived by dividing the reported barrels per calendar day capacity by .95.

Current year and projected year data for downstream charge capacity, production capacity, and data for working and shell storage capacity are taken directly from the previous year's annual report.

### **Confidentiality**

The Office of Legal Counsel of the Department of Justice concluded on March 20, 1991, that the Federal Energy Administration Act requires the Energy Information Administration to provide company-specific data to the



Department of Justice, or to any other Federal agency when requested for official use, which may include enforcement of Federal law. The information contained on this form may also be made available, upon request, to another component of the Department of Energy (DOE), to any Committee of Congress, the General Accounting Office, or other Congressional agencies authorized by law to receive such information. A court of competent jurisdiction may obtain this information in response to an order.

Information on operable atmospheric crude oil distillation capacity, downstream charge capacity, and production capacity on Form EIA-820 are not considered as confidential, and historically have not been treated as such. Company identifiable data are published in the *Petroleum Supply Annual* (PSA) 1996, Volume 1, Tables 38, 39, and 40.

Other data on the Form EIA-820 are kept confidential and not disclosed to the public to the extent that it satisfies the criteria for exemption under the Freedom of Information Act (FOIA), 5 U.S.C.552, Department of Energy (DOE) regulations, 10 C.F.R.1004.11, implementing the FOIA, and the Trade Secrets Act, 18 U.S.C.1905.

Upon receipt of a request for this information under the FOIA, the DOE shall make a final determination whether the information is exempt from disclosure in accordance with the procedures and criteria provided in the regulations. To assist us in this determination, respondents should demonstrate to the DOE that, for example, their information contains trade secrets or commercial or financial information whose release would be likely to cause substantial harm to their company's competitive position. A letter accompanying the submission that explains (on an element-by-element basis) the reasons why the information would be likely to cause the respondent substantial competitive harm if released to the public would aid in this determination. A new justification does not need to be provided each time information is submitted on the form, if the company has previously submitted a justification for that information and the justification has not changed.

The data collected on Form EIA-820, "Biennial Refinery Report," is used to report aggregate statistics on and conduct analyses of the operation of U.S. petroleum refineries. The data appear in EIA publications such as *PSA*, and the *Annual Energy Review*. Company specific data are also provided to other DOE offices for the purpose of examining specific refinery operations in the context of emergency response planning and actual emergencies.

The tables pertaining to refinery receipts of crude oil by method of transportation and fuels consumed at the refinery published in the *PSA* are not subject to statistical

nondisclosure procedures. Thus, there may be some table cells which are based on data from only one or two respondents, or which are dominated by data from one or two large respondents. In these cases, it may be possible for a knowledgeable user of the data to make inferences about the data reported by a specific respondent.

### Quality Control

There are two types of errors usually associated with data produced from a survey - sampling errors and nonsampling errors. Because estimates from the Form EIA-820 survey are based on a complete census of the frame of petroleum refineries, there is no sampling error in the data presented in this report. The data, however, are subject to nonsampling errors. Nonsampling errors are those which can arise from: (1) the inability to obtain data from all companies in the frame or sample (nonresponse) and the method used to account for nonresponses; (2) definitional difficulties and/or improperly worded questions which lead to different interpretations; (3) mistakes in recording or coding the data obtained from respondents; and (4) other errors of collection, response, coverage, and estimation. Quality control procedures are employed in the collection and editing operations to minimize misrepresentation and misreporting. Nonresponse follow-up procedures are employed to reduce the number of nonrespondents, and procedures employed to impute missing data, introduce a minimal amount of error, given the relatively small volume of imputed data.

### Resubmissions

Resubmissions are required whenever an error greater than 5 percent of the true value is discovered. In the event of a reporting error, company reports are updated after contact with the company and are followed up by corrected report resubmissions. Late submissions or resubmissions received after the publication date are entered into a "working" file. This file contains the most up-to-date data for the Form EIA-820 and is used to edit next year's data.

## Note 4. Technical Notes for Detailed Statistics Tables

The detailed statistics tables in the *Petroleum Supply Annual* provide complete supply and demand information for the previous year. The tables are organized to locate National and Petroleum Administration for Defense (PAD) District summary data at the front followed by tables on crude oil and petroleum product production, import/export data, stocks information, and lastly, data on crude oil and petroleum product movements. To assist in the interpretation of these tables, the following technical notes are

provided. Column and row headings are defined in the Glossary.

## Supply

**Field Production** - Field production is the sum of crude oil production, natural gas plant liquids production, other liquids production, and finished petroleum products production.

Crude oil production is an estimate based on data received from State conservation agencies and the Mineral Management Service of the U.S. Department of the Interior. Refer to Explanatory Note 5 for further details.

Field production of natural gas plant liquids is reported on Form EIA-816 and published on a net basis (i.e., production minus inputs) in this column.

Other liquids field production is calculated by forcing the product supplied to be zero: thereby backing into field production.

Field production of finished petroleum products is calculated by (1) adding the amount of fuel ethanol that has been blended into finished motor gasoline, and (2) plus (+) or minus (-) the field production of motor gasoline blending components. Refer to Explanatory Note 10 for a further discussion of this calculation.

Negative field production of motor gasoline blending components represents an understatement for finished motor gasoline.

Negative field production of other finished motor gasoline represents an overstatement of other finished motor gasoline and an understatement of oxygenated motor gasoline.

**Refinery Production** - Published production of these products equal refinery production minus refinery input. Refinery production of other hydrocarbons, hydrogen and alcohol, unfinished oils, and motor and aviation gasoline blending components appear on a net basis under refinery input. Negative refinery production will occur when the amount of a product produced during the month is less than the amount of that same product that is reprocessed (input) or reclassified to become another product during the same month.

**Unaccounted for Crude Oil** - This column is a balancing item for crude oil. This data element represents the difference between crude oil supply and disposition. Crude oil supply is the sum of field production and imports. Crude oil disposition is the sum of stock change, losses, refinery inputs, exports, and products supplied. A positive

result indicates that refiners and exporters reported use of more crude oil than was reported to have been available to them. (This occurs, for example, when imports are undercounted due to late reporting or other problems.) A negative result indicates that more crude oil was reported to have been supplied to refiners and exporters than they reported to have used.

## Disposition

**Stock Change** - This column is calculated as the difference between the Ending Stocks column of this table and the Ending Stocks column of the prior year's publication. A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks.

**Crude Losses** - The volume of crude oil reported by petroleum refineries as being lost in their operations. These losses are due to spills, contamination, fires, etc., as opposed to refining processing losses or gains.

**Refinery Inputs** - Refinery inputs of crude oil and intermediate materials (unfinished oils, gasoline blending components, other hydrocarbons and oxygenates, liquefied petroleum gases, and pentanes plus) that are processed at refineries to produce finished petroleum products.

Crude oil inputs represents total crude oil (domestic and foreign) input to atmospheric crude oil distillation units and other refinery processing units (i.e., catalytic cracking units, cokers).

Inputs of natural gas liquids are natural gas liquids received from natural gas plants for blending and processing. Published inputs of natural gas liquids are reported on a gross basis.

Inputs of unfinished oils, motor and aviation gasoline blending components, and other hydrocarbons and oxygenates are published on a net basis (i.e., refinery input minus refinery production).

Inputs of finished petroleum products are published on a net basis (i.e., refinery production minus refinery inputs) and displayed under the refinery production column.

**Exports** - Exports include crude oil shipments from the 50 States to Puerto Rico, and the Virgin Islands.

**Products Supplied** - Products supplied is equal to field production, plus refinery production, plus imports, plus unaccounted for crude oil, (plus net receipts on a PAD District basis), minus stock change, minus crude losses, minus refinery inputs, minus exports.



Products supplied indicates those quantities of petroleum products supplied for domestic consumption. Occasionally, the result for a product is negative because total disposition of the product exceeds total supply. Negative products supplied may occur for a number of reasons: (1) product reclassification has not been reported; (2) data were misreported or reported late; (3) in the case of calculations on a PAD District basis, the figure for net receipts was inaccurate because the coverage of inter-district movements was incomplete; and (4) products such as gasoline blending components and unfinished oils have entered the primary supply channels with their production not having been reported, e.g., streams returned to refineries from petrochemical plants.

Product supplied for crude oil is the sum of crude oil burned on leases and by pipelines as fuel. Prior to January 1983, crude oil burned on leases and by pipelines as fuel were reported as either distillate or residual fuel oil and were included in product supplied for these products.

#### Yields

The refinery yield of finished motor gasoline is calculated by subtracting the inputs of pentanes plus, liquefied petroleum gases, other hydrocarbons/alcohol and motor gasoline blending components from the production of finished motor gasoline before dividing by the sum of crude oil input and unfinished oils input (net).

The refinery yield of finished aviation gasoline is calculated by subtracting the inputs of aviation gasoline blending components from the production of finished aviation gasoline before dividing by the sum of crude oil input and unfinished oils input (net).

Refinery yields for all products (except finished motor gasoline and finished aviation gasoline) are calculated by dividing the production for each product by the sum of crude oil input and unfinished oils input (net) reported in the U.S. total.

#### Stocks

Primary stocks of petroleum products do not include either secondary stocks held by dealers and jobbers or tertiary stocks held by consumers.

#### Movements

Movements of crude oil by pipeline between PAD Districts include trunk pipeline companies (interstate, intrastate, and intracompany pipelines). Intermediate movements for crude oil pipeline systems operating in more than two PAD Districts are not included.

Movements of petroleum products by pipeline between PAD Districts include trunk pipeline companies (interstate, intrastate and intracompany pipelines). Intermediate movements for product pipeline systems operating in more than two PAD Districts are included. For example, a shipment originating in PAD District 3, passing through PAD District 2 to PAD District 1, is reported as a movement from PAD District 3 to PAD District 2 and also from PAD District 2 to PAD District 1.

Waterborne movements of crude oil and petroleum products between PAD Districts include all shipments of crude oil or petroleum products for which the transporter has custody at the time of shipment. Custody is defined as physical possession of crude oil or petroleum products on a company-owned tanker and barge.

### Note 5. Domestic Crude Oil Production

The Energy Information Administration (EIA) collects monthly crude oil production data on an ongoing basis. Data on crude oil production for States are reported to the EIA by State government agencies. Data on crude oil production for Federal offshore areas are reported to the EIA by the Minerals Management Service of the U.S. Department of the Interior. Currently, all except four crude oil producing States (Michigan, New York, Ohio, and Pennsylvania) report production on a monthly basis. These four States report crude oil production on an annual basis. Estimates of monthly crude oil production for these four States are made by the EIA using data reported on Form EIA-182, "Domestic Crude Oil First Purchase Report."

After the end of each calendar year, the monthly crude oil production estimates are updated using annual reports from various State agencies, the Minerals Management Service and the Conservation Committee of California Oil and Gas Producers. The EIA incorporates production data into its Crude Oil Production System (COPS) as the data are received from the reporting agencies. EIA publications show portions of this database at specific points in time. Table 14 of this publication presents the 1996 crude oil production data received by the EIA as of May 1997. Crude oil production data for 1996 received after May 1997 will be published later as an appendix in the following year's *Petroleum Supply Annual (PSA)*. Table C1 of this publication presents the 1995 crude oil production a year after it was published in the *PSA* 1995.

### Note 6. Export Data

Each month the Energy Information Administration (EIA) receives magnetic tapes of aggregated export statistics

from the U.S. Bureau of the Census (EM-522 and EM-594).

Census export statistics used in the *Petroleum Supply Annual* reflect both government and nongovernment exports of domestic and foreign merchandise from the United States (the 50 States and the District of Columbia) to foreign countries and U.S. possessions, without regard to whether or not the exportation involves a commercial transaction. The following types of transactions are excluded from the statistics:

- (1) Merchandise shipped in transit through the United States from one foreign country to another, when documented as such with U.S. Customs.
- (2) Bunker fuels and other supplies and equipment for use on departing vessels, planes, or other carriers engaged in foreign trade.

#### Source of Export Information

The official U.S. export statistics are compiled by the U.S. Bureau of the Census. Exporters are required to file export documents with U.S. Customs officials (Customs Form 7525).

#### Country and Area of Destination

The country of destination is defined as the country of ultimate destination or the country where the goods are to be consumed, further processed, or manufactured, as known to the shipper at the time of exportation. If the shipper does not know the country of ultimate destination, the shipment is credited to the last country to which the shipper knows that the merchandise will be shipped in the same form as it was when exported.

## Note 7. Quality Control and Data Revision

#### Quality Control

The Energy Information Administration (EIA) monitors the supply and disposition of crude oil, petroleum products, and natural gas liquids in the United States. Through a tracking system, the EIA provides insight into the activities of primary operators and distributors in the petroleum industry. The tracking system, known as the Petroleum Supply Reporting System (PSRS), consists of production, inputs, imports, inventories, movements, and other petroleum-related data collected on weekly, monthly, and annual surveys.

Survey forms are periodically reviewed for completeness, meaningfulness, and clarity. Modifications are made,

when needed, to maintain efficient measure of the intended data items and to track product movement accurately throughout the industry. Through this process, the EIA can maintain consistency among forms, minimize respondent burden, and eliminate ambiguity.

#### Sampling and Nonsampling Errors

There are two types of errors usually associated with data produced from a survey -- nonsampling errors and sampling errors. Because the estimates for the monthly surveys 810 through 813, 816, and 817 are based on a complete census of the frame, there is no sampling error in the data presented. The data, however, are subject to nonsampling errors. Nonsampling errors, sometimes referred to as biases, are those which can arise from a number of sources: (1) the inability to obtain data from all companies in the frame or sample (nonresponse and the method used to account for nonresponses), (2) definitional difficulties and/or improperly worded questions which lead to different interpretations, (3) mistakes in recording or coding the data obtained from respondents, and (4) other errors of collection, response, coverage, and estimation.

Response rates on the monthly surveys are very high. In general, response rates average above 95 percent for the weekly survey and above 98 percent for monthly surveys. Whenever survey responses are not received in time to be included in published statistics, the data are imputed. Although imputing for missing data may not eliminate the total error associated with nonresponse, it can serve to reduce the error. The data reported in the previous month are used as imputed values for missing data for all surveys except the Forms EIA-814, "Monthly Imports Report," and EIA-817, "Monthly Tanker and Barge Movement Report." There is no imputation procedure for these surveys because these data series, by respondent, are highly variable.

Response error is the major factor affecting the accuracy of PSRS data. Response, or reporting error, is the difference between the true value and the value reported on a survey form. Response error can occur for any number of reasons. For example, figures may be entered incorrectly when written on forms by the respondent, or errors may result from the misunderstanding of survey form instructions or definitions. Response error can also occur from the use of preliminary data when final data are not available. This can result in differences between published preliminary and final data. To help detect and minimize probable reporting errors, automated editing procedures are used to check current data for consistency with past data, as well as for internal consistency (e.g., totals equal to the sums of the parts), and to flag those data elements that fail edit criteria.



Errors can also be introduced during data processing. For example, while creating computer data files, key errors can occur in transcribing or coding the data; or information can be entered into the wrong cell. Using well designed edit criteria which examine orders of magnitude, cell position, and historical reporting patterns, many of these errors can be identified and corrected.

Monthly data are compared to weekly data on a regular basis. Discrepancies between weekly and monthly data are documented and respondents are called when discrepancies are either large (usually over 300 thousand barrels) or consistent (e.g., weekly data are always lower than monthly data). In addition, a comparison of the data collected on the PSRS with other similar data series from sources outside of the Petroleum Supply Division is performed each year. The results of this data comparison are published once a year in the *Petroleum Supply Monthly* (PSM) feature article, "Comparison of Independent Statistics on Petroleum Supply."

Sampling errors are those errors that occur when survey estimates are based on a sample rather than being derived from a complete census of the frame. The 819M data, which are based on sample estimates, serve as leading indicators of the PSRS monthly data for oxygenates. To assess the accuracy of the 819M statistics, data are compared with the monthly aggregate data for the EIA-810, 811, and 812 surveys. Although monthly data are still subject to error, they have been thoroughly reviewed and edited, and are considered to be the most accurate data available.

#### **Data Revision**

Resubmissions are any changes to the originally submitted data that were either requested by the EIA or initiated by the respondent. Resubmissions are compared with the original submission and processed at the time of receipt. For Forms EIA-810 through 813, 816, and 817 the Resubmission Tracking System (RTS) is run after resubmissions have been processed for the month. The RTS enables the user to study major products and data series to see how company resubmissions impact published data on a month by month basis. During the processing year, a summary of the effect of these resubmissions to major series is provided in Appendix C of the PSM.

For the EIA-819M data, a determination is made on whether to process the resubmissions based on the magnitude of the revision. Cell entries on publication tables are marked with an "R" for revised.

#### **Late Response**

Respondents who fail to respond within the prescribed time limit (25th day following the end of the report month) become nonrespondents for that particular report period and are contacted by phone to obtain the current month's data. Respondents who are chronically late (i.e., 3 consecutive months) are notified by EIA either by letter or telephone.

#### **Nonresponse**

Follow-up action is taken when a company fails to respond adequately to data requests from the EIA. Preliminary attempts to gather delinquent reports are made by phone. Noncompliance form letters are sent to those companies that have not submitted reports and have not responded to data requests by phone.

### **Note 8. Frames Maintenance**

The Petroleum Supply Division (PSD) maintains complete lists of respondents to its monthly surveys. Each survey has a list of companies and facilities required to submit petroleum activity data. This list is known as the survey frame. Frame maintenance procedures are used to monitor the status of petroleum companies and facilities currently contained in each survey frame as well as to identify new members to be added to the frame. As a result, all known petroleum supply organizations falling within the definition of "Who Must Submit" participate in the survey.

The activities for frames maintenance are conducted on a monthly and annual basis. Monthly frames maintenance procedures focus on examining several frequently published industry periodicals that report changes in status (births, deaths, sales, and acquisitions) of petroleum facilities producing, transporting, importing, and/or storing crude oil and petroleum products. These sources are augmented by articles in newspapers, letters from respondents indicating changes in status, and information received from survey systems operated by other offices. Survey managers review these sources to monitor changes in company operations and to develop lists of potential respondents. These activities assure coverage of the reporting universe and maintain accurate facility information on addresses and ownership.

Annual frames maintenance focuses on re-evaluating the "must submit" companies filing the Form EIA-814 and reviewing the sample frame for the Form EIA-819M, "Monthly Oxygenate Telephone Report."

To supplement the monthly and annual frames maintenance activities and to provide more comprehensive

coverage, the PSD periodically conducts a comprehensive frames investigation. These investigations result in the reassessment and recompilation of the complete frame for each survey. The effort also includes the evaluation of the impact of potential frame changes on the historical time series data published from these respondents. The results of this frame study are usually implemented in January to provide a full year under the same frame.

### Changes in Survey Frames

Beginning in January 1981, the Energy Information Administration (EIA) expanded its universe to include non-refinery blenders; redefined motor gasoline into two categories (finished leaded and finished unleaded); and separated blending components from finished motor gasoline as a reporting category. Refer to Explanatory Note 11 for further discussion.

In January 1981, 1983, and 1984 numerous respondents were added to bulk terminal and pipeline surveys affecting subsequent stocks reported and stock change calculations. Table B1 displays the end-of-year stocks, in million barrels using the expanded coverage (new basis).

Beginning in January 1986, as a result of frames maintenance activities, 39 respondents were added to the monthly survey frames: 2 motor gasoline blenders, 30 bulk terminal operators, 3 pipeline operators, 3 crude oil stock holders, and 1 tanker and barge operator. Table B2 shows the impact of the data reported by the new respondents on published data for production and stocks of major petroleum products.

**Table B1. New Basis Stocks<sup>1</sup>**  
(Million Barrels)

Commodity	1980	1982	1983
Crude Oil			
Total . . . . .	488	645	723
Other Primary . . . . .	380	351	379
Crude Oil and Petroleum Products . . . . .	1,425	1,461	1,454
Motor Gasoline			
Total . . . . .	263	244	222
Finished . . . . .	214	202	186
Distillate Fuel Oil . . . . .	205	186	140
Residual Fuel Oil . . . . .	91	69	49
Jet Fuel			
Total . . . . .	42	39	39
Kerosene-type . . . . .	36	32	32
Propane/Propylene . . . . .	69	57	55
Liquefied Petroleum Gases . . . . .	128	102	108
Other Petroleum Products . . . . .	207	219	210

<sup>1</sup> Stocks as of December 31.

Also, beginning in January 1986, a major petroleum company consolidated production and stocks reporting for some of its facilities. Data previously reported separately on Form EIA-811, "Monthly Bulk Terminal Report," and on Form EIA-816, "Monthly Natural Gas Liquids Report" for two facilities were combined with data reported for two refineries on Form EIA-810, "Monthly Refinery Report." The primary impact of this reporting change is on Table 18, "Stocks of Crude Oil and Petroleum Products by PAD District," of the *Petroleum Supply Annual*, 1986 which showed a decrease in natural gas liquids (NGL) stocks at bulk terminals and natural gas processing plants, and an increase in NGL stocks at refineries.

**Table B2. Impact of New Respondents to December 1985 PSM Data**

Product	Refinery Production (thousand barrels per day)		Stocks <sup>a</sup> (thousand barrels)	
	Reported by New Respondents	Published U.S. Total	Reported by New Respondents	Published U.S. Total
Leaded Gasoline	1.3	2,326	224	81,379
Unleaded Gasoline	0.6	4,323	276	108,422
Distillate Fuel Oil	0	3,174	1,217	143,911
Residual Fuel Oil	0	1,055	1,747	50,671
NGLs & LRGs	0	393	409	80,898
Other Products	0	3,302	1,413	239,158
Crude Oil (excl. SPR)	—	—	2,314	318,695

<sup>a</sup> Stocks as of December 31, 1985.



## Note 9. Descriptive Monthly Statistics

The universe of each of the Petroleum Supply surveys (refinery, bulk terminal, pipeline, crude oil stock, import, etc.) is relatively small and ever-changing due to company formations, shutdowns, mergers and splits. The frequency distributions of the petroleum supply variables are non-normal, highly variable, positive skewed and leptokurtic; that is, there are many small units and few large ones. Zeros often dominate the responses; that is, not all of the sampling units produce and/or store all products.

The statistics described in Table B3 were calculated from the 1996 monthly surveys and display the following petroleum supply variables:

- (1) The number of active sampling units (respondents).
- (2) The number of sampling units reporting nonzero values (nonzero respondents).
- (3) The average of nonzero values reported in thousand barrels (average).
- (4) The standard deviation of nonzero values reported in thousand barrels (standard deviation).

## Note 10. Practical Limitations of Data Collection Efforts

### Crude Oil Lease Stock Adjustment

End-of-month crude oil stocks held on leases are reported on the EIA-813, "Monthly Crude Oil Report." However, only those companies that store 1,000 barrels or more of crude oil are required to submit a report. Previous frames analysis has shown that crude oil stocks held on leases reported to the EIA are consistently lower than the lease stocks reported to individual states.

Up until 1983, monthly state government data on lease stocks were substituted for EIA data wherever possible in order to rectify the understatement of lease crude oil stocks. State data were available from three states -- Texas, New Mexico, and Montana. To calculate the "lease adjustment," a comparison between EIA reported data and the state government data was made and the difference added to the EIA data for the respective states.

In 1983, the EIA modified the Form EIA-813 to eliminate state data on crude oil stocks and began collecting crude oil stock data by Petroleum Administration for Defense (PAD) District. With this change, the "lease adjustment" could no longer be calculated on a state basis and was changed to a PAD District level.

### Trans Alaskan Pipeline System Adjustment

Beginning with the January 1989 data, adjustments are made to refinery inputs and product supplied of natural gas liquids (NGLs) and refinery inputs of crude oil to account for refiner misreporting. Substantial volumes of NGLs are produced at natural gas processing plants in Alaska and injected into the crude oil moving in the Trans Alaska Pipeline System (TAPS). Refiners receiving any crude oil commingled with NGLs are instructed to report the NGL portion of that stream separately from the crude oil portion. This has not been done for Alaskan crude oil because refiners are unable to identify these volumes for accounting purposes. As a result, the NGL production in Alaska has been credited directly toward product supplied and also toward product supplied from refinery production when the refiner processes the crude oil-NGL mixture. In addition, the reporting of the commingled stream as crude oil by the refiner has overstated crude oil inputs and resulted in an increase in unaccounted for crude oil equal to the volume of NGL in the crude oil.

To offset this reporting error, an adjustment is made to refinery input in all states receiving Alaskan crude oil. The adjustment reduces the crude oil inputs and increases the NGL inputs by an equal amount. Each state adjustment is a portion of the known Alaskan-NGL production that is proportional to the state's share of Alaskan crude oil received at all refineries in the United States. The greatest impact occurs in PAD District V for butane and pentanes plus.

The reporting problem which began in 1987 grew as injections on NGLs into the TAPS increased. Data for 1988 was revised in the *Petroleum Supply Annual* to account for the adjustment.

### Finished Motor Gasoline Product Supplied Adjustment

Beginning with the reporting of January 1993 data, adjustments were made to the product supplied series for finished motor gasoline. It was recognized that motor gasoline statistics published by the EIA through 1992 were under-reported because the reporting system was not collecting all fuel ethanol and motor gasoline blending components being blended downstream from the refinery. The EIA was able to quantify these volumes and make corrective adjustments for 1992 in 1993 (refer to Table B4 in the 1994 PSA).

### Fuel Ethanol Adjustment

Prior to 1993, an estimated 60 to 70 thousand barrels per day of fuel ethanol were added to motor gasoline to produce gasohol but were not included in the EIA finished motor gasoline production data. In 1992, the

Table B3. Descriptive Statistics for Selected Petroleum Supply Variables<sup>1</sup>, 1996

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>Refinery Gross Input to Atmospheric Crude Oil Distillation Units</b>												
Respondents	264	260	258	256	258	258	258	258	259	259	258	259
Nonzero Respondents	155	153	155	156	156	156	157	157	156	155	155	154
Average	2779	2593	2788	2775	2889	2823	2859	2871	2815	2888	2783	2897
Standard Deviation	2832	2606	2804	2836	2998	2885	2895	2914	2900	2996	2902	2981
<b>Refinery Crude Oil Input</b>												
Respondents	264	260	258	256	258	258	258	258	259	259	258	259
Nonzero Respondents	165	164	163	165	166	167	166	167	165	164	166	161
Average	2579	2399	2623	2599	2696	2617	2681	2678	2633	2699	2567	2731
Standard Deviation	2819	2602	2766	2806	2950	2855	2852	2872	2864	2956	2862	2940
<b>Refinery Finished Motor Gasoline Gross Production</b>												
Respondents	264	260	258	256	258	258	258	258	259	259	258	259
Nonzero Respondents	172	171	171	170	164	162	163	162	164	168	167	169
Average	1314	1240	1326	1327	1465	1445	1489	1483	1387	1381	1403	1428
Standard Deviation	1419	1343	1436	1445	1564	1516	1554	1531	1467	1460	1481	1469
<b>Refinery Distillate Fuel Oil Gross Production</b>												
Respondents	264	260	258	256	258	258	258	258	259	259	258	259
Nonzero Respondents	153	154	154	154	154	155	156	153	152	153	151	154
Average	666	621	665	681	695	664	668	716	716	781	767	760
Standard Deviation	721	650	678	719	710	640	692	759	720	810	826	824
<b>Refinery Residual Fuel Oil Gross Production</b>												
Respondents	264	260	258	256	258	258	258	258	259	259	258	259
Nonzero Respondents	114	115	114	112	114	112	111	113	113	112	111	112
Average	224	210	199	189	204	202	194	208	196	204	203	221
Standard Deviation	294	293	276	246	290	298	290	301	270	284	276	315
<b>Refinery Finished Gasoline Stocks</b>												
Respondents	264	260	258	256	258	258	258	258	259	259	258	259
Nonzero Respondents	170	172	172	175	175	174	173	173	171	170	169	169
Average	310	304	291	270	271	267	268	253	277	268	260	275
Standard Deviation	332	331	281	305	298	275	289	280	285	262	273	283
<b>Bulk Terminal Finished Motor Gasoline Stocks</b>												
Respondents	320	318	318	318	317	316	315	313	315	314	314	313
Nonzero Respondents	143	142	142	144	144	143	143	141	142	141	141	141
Average	472	456	413	423	441	456	454	445	453	405	426	435
Standard Deviation	945	908	858	888	902	911	897	876	893	800	823	835
<b>Pipeline Finished Motor Gasoline Stocks</b>												
Respondents	82	82	82	82	82	82	82	82	82	82	82	82
Nonzero Respondents	53	53	52	51	52	52	52	52	52	52	51	53
Average	916	969	953	1012	977	1004	1002	930	956	892	915	927
Standard Deviation	1911	2073	2099	2118	2150	2138	2189	1998	2020	1848	1878	1879
<b>Refinery Distillate Fuel Oil Stocks</b>												
Respondents	264	260	258	256	258	258	258	258	259	259	258	259
Nonzero Respondents	202	201	201	202	200	200	201	201	199	200	198	199
Average	193	169	151	162	171	186	187	198	202	197	206	211
Standard Deviation	247	197	171	200	222	234	245	289	301	253	244	267
<b>Bulk Terminal Distillate Fuel Oil Stocks</b>												
Respondents	320	318	318	318	317	316	315	313	315	314	314	313
Nonzero Respondents	206	203	201	201	200	198	201	194	197	199	200	199
Average	236	194	181	168	186	206	217	232	243	243	270	284
Standard Deviation	502	446	416	387	415	432	434	499	506	579	620	638
<b>Pipeline Distillate Fuel Oil Stocks</b>												
Respondents	82	82	82	82	82	82	82	82	82	82	82	82
Nonzero Respondents	52	55	53	52	52	54	55	53	54	54	53	55
Average	504	435	434	453	470	438	465	482	496	500	511	513
Standard Deviation	1308	1124	1083	1117	1116	1007	1112	1118	1225	1386	1352	1367
<b>Refinery Residual Fuel Oil Stocks</b>												
Respondents	264	260	258	256	258	258	258	258	259	259	258	259
Nonzero Respondents	130	130	130	130	130	130	129	128	128	127	127	130
Average	129	125	113	116	116	123	118	126	130	131	132	137
Standard Deviation	165	164	143	146	138	163	139	154	179	208	224	257
<b>Bulk Terminal Residual Fuel Oil Stocks</b>												
Respondents	320	318	318	318	317	316	315	313	315	314	314	313
Nonzero Respondents	67	66	68	68	66	65	64	63	64	63	63	63
Average	276	232	244	269	286	286	302	308	327	340	406	443
Standard Deviation	563	475	501	563	653	630	663	646	725	660	782	795
<b>Refinery Crude Oil Stocks</b>												
Respondents	264	260	258	256	258	258	258	258	259	259	258	259
Nonzero Respondents	167	167	167	166	165	165	165	165	165	165	165	165
Average	554	543	557	595	578	629	621	644	583	578	558	509
Standard Deviation	665	598	632	668	658	704	694	740	675	660	670	587
<b>Pipeline/Tank Farm Crude Oil Stocks</b>												
Respondents	175	175	175	175	175	175	175	175	175	176	176	176
Nonzero Respondents	125	125	125	125	125	124	124	125	124	124	125	124
Average	1394	1394	1370	1359	1406	1436	1430	1437	1449	1465	1441	1375
Standard Deviation	2785	2781	2777	2680	2775	2867	2855	2912	2894	2864	2838	2660

<sup>1</sup> The respondent data on this table excludes zero reporting companies.



**Table B4. Finished Motor Gasoline Product Supplied Adjustment, 1993 to Present  
(Thousand Barrels per Day)**

Item/Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Avg
<b>1993</b>													
Fuel Ethanol Adj.....	61	67	70	61	58	63	62	48	68	69	84	81	66
Motor Gas Blending .....	-59	-61	15	-32	-3	-5	-19	54	79	-72	-72	48	-10
Product Supplied .....	6,639	7,112	7,389	7,435	7,585	7,700	7,785	7,864	7,607	7,382	7,533	7,661	7,476
<b>1994</b>													
Fuel Ethanol Adj.....	86	73	76	71	69	63	65	73	59	90	82	82	74
Motor Gas Blending .....	33	-7	27	58	51	82	98	98	81	-16	56	113	57
Product Supplied .....	6,980	7,275	7,395	7,564	7,644	7,922	7,884	7,975	7,615	7,548	7,464	7,924	7,601
<b>1995</b>													
Fuel Ethanol Adj.....	66	66	79	74	58	81	49	36	57	72	91	58	65
Motor Gas Blending .....	8	37	56	86	131	113	46	110	35	89	28	29	64
Product Supplied .....	7,163	7,481	7,788	7,651	7,894	8,220	7,888	8,187	7,786	7,781	7,866	7,742	7,789
<b>1996</b>													
Fuel Ethanol Adj.....	58	53	50	37	27	14	9	20	22	36	43	39	34
Motor Gas Blending .....	61	75	(s)	-8	43	48	103	52	21	80	60	43	48
Product Supplied .....	7,271	7,599	7,792	7,873	8,071	8,088	8,165	8,343	7,662	8,093	7,915	7,794	7,891

Note: Totals may not equal sum of components due to independent rounding.  
Source: • Energy Information Administration, *Petroleum Supply Annual*, Volumes I and II.

EIA attempted to collect these data from downstream fuel ethanol motor gasoline blenders but found that this effort was impractical and the results were inaccurate.

Beginning in January 1993, an estimate for the missing fuel ethanol blended into motor gasoline was calculated (refer to Table B4). This estimate was calculated as production (from the EIA-819M, "Monthly Oxygenate Telephone Report"), plus imports (from the EIA-814, "Monthly Imports Report"), minus inputs at refineries (from the EIA-810, "Monthly Refinery Report"), plus or minus stock change (from the EIA-819M survey). This estimate for the amount of fuel ethanol blended into motor gasoline was added to Table 1 for Natural Gas Liquids Field Production (line 14) and in the Field Production column for finished motor gasoline in Tables 2 through 13 published in the *PSA*.

An estimate for the total amount of gasohol produced with the ethanol is given as 10 times the estimated fuel ethanol blended (this assumes a 10 percent ethanol blend). This amount is added to the column labeled field production of "oxygenated gasoline" and subtracted from the field production of "other" finished gasoline. The PAD District level detail was obtained by allocating the national level estimates according to the percent of gasohol sales from the U.S. Department of Transportation, Federal Highway Administration, *Monthly Motor Fuel Reported by States*, 1991.

#### Motor Gasoline Blending Component Adjustment

Prior to 1993, the EIA published a "product supplied" for motor gasoline blending components. Since these components are to be blended into finished motor gasoline, there is no actual demand for this intermediate product. The EIA corrected this series by including the quantity of "product supplied" for motor gasoline blending components with "other" finished motor gasoline. This change was accomplished in Tables 2 through 13 by adding product supplied for motor gasoline blending components to the column labeled field production of "other" motor gasoline, and subtracting it from the field production column for "motor gasoline blending components."

#### Fuel Ethanol Stock Adjustment

Total end-of-month stocks of fuel ethanol are under-reported in the PSRS because of the inability to collect data from downstream fuel ethanol motor gasoline blenders. Total stocks of fuel ethanol are assumed to be those reported by ethanol producers on the Form EIA-819M, "Monthly Oxygenate Telephone Report." The difference between the stocks reported on the EIA-819M and the stocks reported in the PSRS (from refiners, bulk terminal and pipeline operators) is added to the stocks shown for bulk terminals. If the stocks for the PSRS are higher than those reported on the EIA-819M, no adjustment is made.

## Note 11. 1981 Changes in the Petroleum Supply Reporting System

Petroleum statistics contained in this report for all years through 1980 were developed using definitions, concepts, reporting procedures, and aggregation methods that are consistent with those developed by the U.S. Bureau of Mines. Research conducted by the Energy Information Administration (EIA) in 1979 and 1980 indicated that changes had occurred in the petroleum industry that were not being adequately reflected in EIA's reporting system.

The EIA reporting forms, definitions, and procedures were modified beginning in January 1981 to describe industry operations more accurately. Unfortunately, empirical information is not available to precisely measure the data shortcomings through 1980. Estimates of the magnitudes of differences in the major data series are described below to form a basis for comparing 1979, 1980, and 1981 data.

### Motor Gasoline

Prior to 1979, the EIA product-supplied series for motor gasoline was consistently about 2 percent lower than the Federal Highway Administration (FHWA) gasoline sales data series, which is derived from State tax receipts. The difference increased to about 3 percent in 1979 and 1980. There were two primary causes for this growing difference. First, refinery operations, particularly the flows of unfinished oils and the redesignation of some finished products, were not being accurately described on the EIA survey forms. Second, a large amount of gasoline was being produced away from refineries at "downstream blending stations" to take advantage of provisions in regulations governing the amount of lead that could be added. These blending stations were not reporting gasoline production to the EIA until the data system was changed in January 1981.

Quantitative estimates of the magnitude of the difference in EIA's gasoline product supplied data in 1979 and 1980 have been made by the EIA and the American Petroleum Institute (API). Table B5 provides 1979 and 1980 data as published in the *Petroleum Statement, Annual*, as well as EIA and API estimates of "recast" motor gasoline product supplied.

The EIA recast estimates were based upon preliminary monthly information in the *Monthly Petroleum Statement*. The ranges displayed in the EIA column reflect uncertainty in the estimates. Also shown are the FHWA motor gasoline sales statistics for those years.

Table B5. Finished Motor Gasoline Product Supplied  
(Thousand Barrels per Day)

	EIA Reported	API Recast	EIA Recast	FHWA <sup>a</sup>
1979 . . . . .	7,034	7,302	7,183-7,347	7,258
1980 . . . . .	6,579	6,882	6,806-6,889	6,792

<sup>a</sup> FHWA gasoline statistics based on data from Federal Highway Administration, *Estimate of Total Gasoline Use*, Table MF-21A published October 1980 and September 1981. Aviation gasoline (Table MF-24) has been subtracted from FHWA product supplied quantities to make data comparable.

### Distillate and Residual Fuel Oil

Distillate and residual fuel oil refinery production statistics through 1980 were adjusted to account for an imbalance between unfinished oil supply and disposition. The reported quantities of refinery inputs of unfinished oils typically exceed the available supply of unfinished oils. It has been assumed that this occurs when distillate and residual fuel oils produced by a refinery are shipped to another refinery, where it is treated as unfinished oil. This oil is then reprocessed rather than used or sold as distillate or residual fuel oil.

For many years (including 1980), the difference between unfinished oil disposition and supply was subtracted from distillate and residual fuel oil production to adjust for this discrepancy. Two-thirds of the difference was applied to distillate fuel oil, and one-third to residual fuel oil.

Beginning in January 1981, this adjustment was discontinued because there was not sufficient empirical evidence to support it. Table B6 presents distillate and residual fuel oil refinery production in 1979 and 1980 as published (adjusted) and on the same basis as 1981 statistics (unadjusted) to permit comparison.

Table B6. Distillate and Residual Fuel Oil  
Production and Product Supplied  
(Thousand Barrels per Day)

	Adjusted Refinery Production	Unadjusted Refinery Production	Difference	Unadjusted Product Supplied
<b>Distillate Fuel Oil</b>				
1979 . . . . .	3,152	3,169	16	3,327
1980 . . . . .	2,661	2,764	103	2,969
<b>Residual Fuel Oil</b>				
1979 . . . . .	1,687	1,695	8	2,834
1980 . . . . .	1,580	1,634	54	2,562



Adjusted distillate and residual fuel oil product supplied volumes differ from the unadjusted volumes by the same amounts as the adjusted and unadjusted production volumes.

### **Total Petroleum Products**

The imbalance between the supply and disposition of unfinished oils and gasoline blending components is included with other products (line 35) in Table 1. These imbalances are reported as negative product supplied in Table 2. Since these changes only involve redistribution of the volumes of finished motor gasoline, distillate and residual fuel oil, gasoline blending components, and unfinished oils, the total volume of petroleum products supplied remains unaffected by them.

### **Alaskan In Transit Stocks**

Stocks of Alaskan crude oil in-transit were included for the first time in January 1981. The major impact of this change is on the reporting of stock change calculations. Using the expanded coverage (new basis), 1980 end-of-year crude oil stocks would have been 488 million barrels (Total) and 380 million barrels (Other Primary).

## **Note 12. 1983 Changes in the Petroleum Supply Reporting System**

January 1983 marked the implementation of recent changes in the collection, processing and availability of the Energy Information Administration's (EIA) petroleum supply data. Survey forms and definitions were made consistent; frames for bulk terminals, petroleum product pipelines and crude oil stock holders were updated, and the survey processing system was redesigned and incorporated into the new Petroleum Supply Reporting System (PSRS).

### **Changes in Data Collection**

Changes in data collection can be grouped into five categories. Some were made to improve consistency, others to classify activity more precisely, and others to combine or eliminate information elements or to reduce the frequency of reporting in recognition of the trade-off between data value and reporting burden. The changes are itemized below.

- Motor gasoline was divided into three standard categories (finished leaded motor gasoline, finished unleaded motor gasoline and motor gasoline blending components).

- Aviation gasoline blending components were added to Form EIA-817.
- Crude oil burned as fuel on leases and by pipelines is reported as a single item on Form EIA-813. Previously it was reported as distillate or residual fuel oil consumption.
- Number 4 Fuel Oil is now included with distillate fuel oil.
- Gasohol was eliminated as a separate category and is now reported as either "finished leaded motor gasoline" or "finished unleaded motor gasoline."
- Waterborne movements of petrochemical feedstocks are now divided into naphtha-less than 401 degrees end-point and other-oils equal to or greater than 401 degrees end-point on Form EIA-817.
- Data aggregation for Petroleum Administration for Defense District (PADD) I was divided into three sub-districts on Forms EIA-812 and 817.
- Detailed categories of Gross Input to Crude Oil Distillation Units were eliminated, and only Total Gross Inputs are collected on Form EIA-810.
- Waterborne movements of crude oil and petroleum products between PADDs, on Form EIA-817, no longer reflect shipping and receiving States.
- Reporting of production and stocks of Number 4 Fuel Oil by sulfur levels were eliminated from Forms EIA-810, 811, 812, and 817.
- Crude oil stocks are collected at PADD levels rather than State levels on Form EIA-813.
- Shipments from natural gas processing plants no longer reflect destination by facility type on Form EIA-816.
- The four categories for unfinished oils were reduced to two on Form EIA-810.
- The five categories for sulfur content of residual fuel oil were reduced to three on Forms EIA-810, 811, and 817.
- Normal Butane and Other Butanes were combined into a single category on Forms EIA-810, 811, and 816.
- Three subcategories of lubricating oils (bright stock, neutral, and other) were combined into a single category on the Form EIA-810.

- Three subcategories of waxes (microcrystalline, crystalline-fully refined, and crystalline-other) were combined into a single category on the Form EIA-810.
- Asphalt and Road Oil were combined into a single category on Forms EIA-810 and 811.
- Plant fuel use and Losses were combined on Form EIA-816.
- Natural Gasoline and Isopentane were combined on Form EIA-816.

#### Change in Crude Oil Lease Stocks

The end-of-month crude oil stocks held on leases are reported on the Form EIA-813, "Monthly Crude Oil Report." However, only those companies that store 1,000 barrels or more of crude oil are required to submit a report. Previous frames analysis has shown that crude oil stocks held on leases reported to the Energy Information Administration (EIA) are consistently lower than the lease stocks reported to individual states.

Up until 1983, monthly state government data on lease stocks were substituted for EIA data wherever possible in order to rectify the understatement of lease crude oil stocks. State data were available from three states -- Texas, New Mexico, and Montana. To calculate the "lease adjustment", a comparison between the EIA reported data and the state government data was made and the difference added to the EIA data for respective states.

In 1983, the EIA modified the Form EIA-813 to eliminate state data on crude oil stocks and began collecting crude oil stock data by PAD District. With this change, the "lease adjustment" could no longer be calculated on a state basis and was changed to a PAD District level.

### Note 13. 1984 Changes in the Petroleum Supply Reporting System

In January 1984, a number of changes in the reporting of natural gas liquids (NGL) were implemented. The modified system reflects supply and disposition of NGL on a component, rather than a product, basis.

From 1979 to 1983, the Energy Information Administration (EIA) collected and reported information on the supply and disposition of nine NGL products. Beginning with January 1984, NGL supply and disposition data were reported for 5 components to be consistent with record keeping practices used by the industry. Table B7 shows the product category under the new and old basis. Four

Petroleum Supply Reporting System surveys were modified beginning in January 1984. They were:

EIA-810	"Monthly Refinery Report"
EIA-811	"Monthly Bulk Terminal Report"
EIA-812	"Monthly Product Pipeline Report"
EIA-816	"Monthly Natural Gas Liquids Report"

This change affected stocks reported and stock change calculations. Under the new basis, end-of-year 1983 stocks would have been 108 million barrels (Liquefied Petroleum Gases) and 210 million barrels (Other Petroleum Products).

Table B7. Product Basis vs. Component Basis Reporting

1979-1983 Product Basis	1984 Component Basis				
	Ethane	Propane	Normal Butane	Isobutane	Pentanes Plus
Ethane	•				
Ethane-Propane Mixtures	•	•			
Propane		•			
Butane-Propane Mixtures		•	•		
Butane			•		
Isobutane				•	
Unfractionated Stream	•	•	•	•	•
Natural Gasoline and Isopentane					•
Plant Condensate					•

A fifth survey, Form EIA-814, "Monthly Imports Report" (formerly Form ERA-60), was not modified. Therefore, in order to allocate imports and exports of mixed NGL streams to individual component parts, the EIA developed a statistical algorithm.

#### Imports

The imports algorithm was based on information gathered from the larger importers of NGL, who were asked to provide component analysis of the products they imported during the first 6 months of 1983. The percentages shown in Table B8 are derived from the weighted averages of the data provided by the importers.

#### Exports

The exports algorithm was based on information gathered from the larger exporters of NGL, who were asked to provide component analysis of the products they exported



**Table B8. Algorithm for Allocating NGL Imports/Exports  
(Percent)**

Product	EIA Component Slate				
	Ethane	Propane	Normal Butane	Isobutane	Pentanes Plus
<b>Import Product</b>					
Natural Gasoline and Isopentane (EIA-814) . . .	—	—	—	—	100
Plant Condensate (EIA-814) . . . . .	—	—	—	—	100
Ethane (IM-145) . . . . .	100	—	—	—	—
Propane (IM-145) . . . . .	—	100	—	—	—
Butane (IM-145) . . . . .	—	—	65	35	—
Butane-Propane Mixtures (IM-145) . . . . .	—	40	35	20	5
Ethane-Propane Mixtures (IM-145) . . . . .	60	40	—	—	—
<b>Export Product</b>					
Ethane (All PAD Districts) . . . . .	100	—	—	—	—
Propane (All PAD Districts) . . . . .	—	100	—	—	—
Butane (All PAD Districts) . . . . .	—	—	100	—	—
<b>Mixed Streams</b>					
PAD Districts I, IV, V . . . . .	—	40	60	—	—
PAD District II . . . . .	30	25	15	15	15
PAD District III . . . . .	—	80	20	—	—

during 1983. The percentages shown in Table B8 are derived from the weighted averages of the data provided by the exporters. It was necessary to derive percentages by Petroleum Administration for Defense Districts of exportation, due to the wide variation of components included in the mixed streams.

#### **Note 14. 1985 Changes in the Petroleum Supply Reporting System**

Beginning in January 1985, inter-Petroleum Administration for Defense (PAD) District pipeline movements of crude oil were included in the crude oil supply balance at the PAD District level but did not affect National level statistics. As a result of including these movements, *Net Receipts* of crude oil and *Unaccounted for Crude Oil* at the PAD District level changed significantly. Also affected were crude oil imports and unfinished oil imports at the PAD District level which are provided by *PAD District of Entry* (Tables 4-8) and by *PAD District of Processing* (Table 14).

The tables in the *Petroleum Supply Annual* that were changed due to the inclusion of inter-PAD District pipeline movements of crude oil are listed below:

- Tables 4 through 8, "PAD Districts I to V, Supply and Disposition of Crude Oil and Petroleum Products."
  - Effective January 1985, crude oil imports and unfinished oil imports in Tables 4 through 8 were reported at the *PAD District of Entry* rather than at the *PAD District of Processing*. *Net Receipts* now include movements by pipeline as well as by tanker and barge.
- Table 20, "Movements of Crude Oil and Petroleum Products by Pipeline, Tanker, and Barge Between PAD Districts."
  - The crude oil line includes movements by pipeline as well as by tanker and barge.
- Table 21, "Movements of Crude Oil and Petroleum Products by Pipeline Between PAD Districts."
  - A line was added to report crude oil movements.
- Table 23, "Net Movements of Crude Oil and Petroleum Products by Pipeline, Tanker, and Barge Between PAD Districts."
  - The crude oil line includes movements by pipeline as well as by tanker and barge.

## Note 15. 1986 Changes in the Petroleum Supply Reporting System

Beginning in January 1986, several changes to the Petroleum Supply Reporting System (PSRS) went into effect. These changes affected the frame of operators of petroleum facilities required to complete the monthly surveys in the PSRS and resulted in some changes to the tables presented in the *Petroleum Supply Monthly* and were subsequently published in the *Petroleum Supply Annual* (PSA). Refer to Explanatory Note 8 for a detailed description of frames maintenance and updates.

### Changes in Data Collection

- The unit of measure used on Form EIA-814, "Monthly Imports Report," has been changed from barrels to thousands of barrels.
- Unfinished oil imports data, previously reported as one product on the Form EIA-814, are now reported separately under four classifications. These classifications are:
  - Naphthas and lighter
  - Kerosene and light gas oils
  - Heavy gas oils
  - Residuum
- The number of categories for reporting natural gas liquids and liquefied petroleum gases data on Form EIA-814 was reduced from 19 to 5 by eliminating the requirement to separately identify categories for further processing, petrochemical use, and fuel use.
- The requirements to report the type of processing facility and the applicable section of the oil import regulations were eliminated for the Form EIA-814.
- The requirement to report data for imports of crude oil, unfinished oils, and finished products on separate schedules of the Form EIA-814 was eliminated.
- The requirement to report two end-use categories, petrochemical use and other use, for still gas and liquefied refinery gases, was eliminated on Form EIA-810, "Monthly Refinery Report."
- Form EIA-815, "Monthly Shipments from Puerto Rico to the United States Report," was discontinued. The data previously reported on this form are now reported on Form-814.

### Changes in Publication Tables

Several changes were also made to tables in the *PSA* either as a direct result of changes in reporting require-

ments or to improve the usefulness of the publication. These changes were:

- Table 11, "Refinery Input of Crude Oil and Petroleum Products by PAD District."
  - Alaskan crude oil receipts were shown separately.
- Table 12, "Refinery Production of Petroleum Products by PAD District."
  - The breakout between "petrochemical feedstock use" and "other use" were no longer shown separately for still gas or for liquefied refinery gases.
- Table 14, "Imports of Crude Oil and Petroleum Products by PAD District."
  - Imports of unfinished oils were separated into four categories: naphthas and lighter, kerosene and light gas oils, heavy gas oils, and residuum.
- Table 15, "Imports of Crude Oil and Petroleum Products by Source."
  - Countries formerly included in the categories "Other Western Hemisphere" and "Other Eastern Hemisphere" were shown individually.
- Table 18, "Stocks of Crude Oil and Petroleum Products by PAD District."
  - The breakout between "petrochemical feedstock use" and "other use" for each liquefied petroleum gas was eliminated.

## Note 16. 1987 Changes in the Petroleum Supply Reporting System

Several changes to the Petroleum Supply Reporting System went into effect at the beginning of January 1987. These changes were made as part of the Energy Information Administration's (EIA's) continuing effort to provide pertinent, timely, and consistent energy information. These changes were subsequently reflected in the *Petroleum Supply Annual* (PSA).

### Changes in Data Collection

Fresh feed input to catalytic cracking units, hydrocracking units, and cokers were added to the Form EIA-810, "Monthly Refinery Report."



### Changes in Publication Tables

- The "Appalachian No. 2" Refining District was combined with the "Indiana, Illinois, Kentucky," Refining District. This affected *PSA* Tables 10 through 13, 18, 24, and 25.
- Fresh feed inputs to catalytic cracking units, hydrocracking units, and cokers were added to Table 11, "Refinery Input of Crude Oil and Petroleum Products by PAD District."

### Clarification

In 1986, several refineries and terminals in the United States applied for Foreign Trade Zone (FTZ) status and applications from three refineries were approved. Consequently, during 1986, some refineries with FTZ status were treated as if they were within the United States while the Hawaiian FTZ was considered outside.

Effective with the January 1987 data, all FTZ facilities located within the 50 United States are considered domestic entities and are included in *PSA* statistics. The principal differences in the *PSA* data series as a result of adding the Hawaiian FTZ was an approximate 1 percent increase in crude imports and a 3 percent decrease in product imports.

### Note 17. 1989 Changes in the Petroleum Supply Reporting System

Several changes to the Petroleum Supply Reporting System (PSRS) went into effect at the beginning of January 1989. These changes were made to reduce respondent burden, to fulfill user requests for additional data, and to improve accuracy and consistency in reporting. To reflect these changes and to improve the usefulness of the *Petroleum Supply Monthly* (PSM) publication, the following changes were made in January 1989 and are subsequently reflected in the *Petroleum Supply Annual* (PSA) publication.

#### Changes in Data Collection

- Data on inputs and production of naphthenic and paraffinic lubricants were added to the Form EIA-810, "Monthly Refinery Report."
- Separate lines for the collection of inputs and production of olefins (ethylene, propylene, and butylene) were added to Form EIA-810, "Monthly Refinery Report."
- The collection of data on the movement of Liquefied Petroleum Gases (LPGs) and Liquefied Refinery Gases

(LRGs) on a component basis were added to the Forms EIA-812, "Monthly Product Pipeline Report," and the EIA-817, "Monthly Tanker and Barge Movement Report."

- Bonded imports of jet fuel and fuel oils and imports of LPGs previously published from data provided by the U.S. Bureau of the Census were discontinued. Data are now published from the data reported on the Form EIA-814, "Monthly Imports Report."
- Exports of butane/propane and ethane/propane mixtures were split in a ratio of 60 percent for the butane and ethane portions and 40 percent for the propane portion.
- The reporting of products other than Natural Gas Liquids (NGLs) by natural gas processing plants was eliminated on the Form EIA-816, "Monthly Natural Gas Liquids Report."
- Fractionators were required to report only end-of-month stocks of NGLs on the Form EIA-816, "Monthly Natural Gas Liquids Report."

#### Changes in Natural Gas Liquids and Crude Oil Statistics

Beginning with the January 1989 issue of the *PSM*, adjustments were made to refinery inputs and product supplied of NGLs and refinery inputs of crude oil to account for refiner misreporting. Substantial volumes of NGLs are produced at natural gas processing plants in Alaska and injected into the crude oil moving in the Trans Alaska Pipeline System (TAPS). Refiners receiving any crude oil commingled with NGLs are instructed to report the NGL portion of that stream separately from the crude oil portion. This has not been done for Alaskan crude oil because refiners are unable to identify these volumes for accounting purposes. As a result, the NGL production in Alaska has been credited directly toward product supplied and also toward product supplied from refinery production when the refiner processes the crude oil-NGL mixture. In addition, the reporting of the commingled stream as crude oil by the refiner has overstated crude oil inputs and resulted in an increase in unaccounted for crude oil equal to the volume of NGL in the crude oil.

To offset this reporting error, an adjustment was made to refinery input in all Petroleum Administration for Defense (PAD) Districts receiving Alaskan crude oil. The adjustment reduces the crude oil inputs and increases the NGL inputs by an equal amount. Each PAD District adjustment is a portion of the known Alaskan NGL production that is proportional to the PAD District's share of Alaskan crude oil received at all refineries in the United States. The

Table B9. Conversion Table for 1989 PSA

Table Numbers									
Old	New	Old	New	Old	New	Old	New	Old	New
1	1	NA	9	12, 24	17	15	25	21	33
2	2	7	10	18, 25	18	27	26	22, 26	34
3	3	NA	11	13	19	16	27	23	35
4	4	8	12	14, 27	20	17	28		
NA	5	NA	13	15	21	NA	29		
5	6	9	14	15	22	18, 25	30		
NA	7	10	15	15	23	19	31		
6	8	11	16	15	24	20	32		

NA = Not Applicable

greatest impact occurs in PAD District V for butane and pentanes plus.

The reporting problem began in 1987 and has grown as injections of NGLs into the TAPS have increased. Data for 1988 was revised to account for the adjustment in the PSA. Revisions for 1987 data are not planned.

#### Changes in Publication Tables

- "Stock Withdrawal" was renamed "Stock Change" and was moved from Supply to Disposition in Tables 2 through 13. A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks.
- A jet fuel total line was added to Tables 2-13, 17, 18, 20, 32-35.
- PAD District Supply and Disposition tables (Tables 4 through 13) now display liquefied petroleum gases on a component basis.
- A table showing net imports by country for the current month (Table 29) was added.
- Table numbers were changed as a result of data additions and table reorganization. Table B9 is provided to show the new to old table numbers for the detailed statistics tables.
- Table 15, "Natural Gas Plant Net Production and Stocks of Petroleum Products by PAD and Refining District."
  - Stocks at natural gas processing plants by Refining District previously published on Table 10 was included with net production of petroleum products at natural gas plants.
- The reporting of products other than natural gas liquids by natural gas processing plants was eliminated.
- Table 17, "Net Refinery Production of Finished Petroleum Products by PAD and Refining District."
  - Net production of olefins (ethylene, propylene, and butylene) was added.
  - Net production of naphthenic and paraffinic lubricants was added.
  - Net production of residual fuel oil by percent sulfur, previously published as Table 24, was added.
- Table 18, "Refinery Stocks of Crude Oil and Petroleum Products by PAD and Refining District."
  - Stocks at refineries by Refining District were added from Table 18.
  - Stocks of residual fuel oil by percent sulfur content, previously published as Table 25, were added.
- Tables 21 through 25, "Imports of Crude Oil and Petroleum Products by Country of Origin."
  - Data previously included in the "Other Products" category were displayed separately for naphthas for petrochemical feedstock use, other oils for petrochemical feedstock use, lubricants, and asphalt and road oil.
- Table 20, "Imports of Crude Oil and Petroleum Products by PAD District."
  - Sulfur content categories for residual fuel oil, previously published as Table 27, were added.



- Table 28, "Exports of Crude Oil and Petroleum Products by Destination."

- Data for exports by destination previously included in the Other Products category were displayed separately for pentanes plus, kerosene, naphthas for petrochemical feedstock use, and other oils for petrochemical feedstock use.

- Table 30, "Stocks of Crude Oil and Petroleum Products by PAD District."

- Refining District data were eliminated. Refinery stocks and natural gas processing plant stocks by Refining District were added to Table 18.

- Sulfur content categories for residual fuel oil, previously published as Table 25, were added.

### **Note 18. 1990 Changes in the Petroleum Supply Reporting System**

Beginning with the May 1990 issue of the *Petroleum Supply Monthly* (PSM), stocks of propane/propylene were added to Table 42, "Refinery, Bulk Terminal, and Natural Gas Plant Stocks of Selected Petroleum Products by State." This change is also reflected in the corresponding table in the *Petroleum Supply Annual* (PSA).

Beginning with the 1991 March issue of the *PSM*, several changes were made to the Petroleum Supply Reporting System to provide additional data and to improve the usefulness of the publication. Although these changes were made in 1991, these changes have been incorporated into the 1990 *PSA* to provide consistent energy information.

#### **Changes in Publication Tables**

##### **Summary Statistics Tables**

- A new table (Table S7) has been added to display jet fuel supply and disposition.
- Table S8, "Other Petroleum Products Supply and Disposition" has been redesignated as Table S9. Jet fuel data are no longer included. Historical data have been revised to exclude jet fuel.
- Table S3, "Crude Oil and Petroleum Product Imports" has been expanded to display all Organization of Petroleum Exporting Countries (OPEC) and additional Non-OPEC countries. A separate column for crude oil imports has also been added for each country.

- Time periods have been included in table titles.

#### **Figures**

- Time periods have been included in figure titles.
- Sources have been provided for each figure.
- Bar graphs used to display end-of-month stocks have been replaced with line graphs.

#### **Sources**

The sources and explanatory notes for this section have been updated and are now located at the end of the Summary Statistics section.

#### **Detailed Statistics Tables**

- Table 1, "U.S. Petroleum Balance"
  - A line has been added to display jet fuel as a separate category for Total Products Supplied and Total Stocks (Lines 34 and 44, respectively).
- Imports of Crude Oil and Petroleum Products by PAD District
  - Residual fuel oil sulfur categories have been added.
- Imports of Crude Oil and Petroleum Products by Country of Origin
  - Residual fuel oil sulfur categories by country of origin have been eliminated. These categories are now reported on a PAD District basis.
  - Separate daily average columns have been added for crude oil and petroleum products.

### **Note 19. 1993 Changes in the Petroleum Supply Reporting System**

In keeping with the Department of Energy's (DOE's) mandated responsibilities, the Energy Information Administration (EIA) made several changes to the Petroleum Supply Reporting System (PSRS) effective in January 1993. These changes were designed to accommodate the revisions to the Clean Air Act of 1990, and to reflect current and upcoming changes in the petroleum industry. These changes are subsequently reflected in the 1993 *Petroleum Supply Annual*.

## Changes in Data Collection

- Motor gasoline categories have been revised to reflect the change in the type of fuels produced. The new categories are: reformulated gasoline, oxygenated gasoline, and other finished gasoline. These changes were made to Forms EIA-810, "Monthly Refinery Report," EIA-811, "Monthly Bulk Terminal Report," EIA-812, "Monthly Product Pipeline Report," EIA-814, "Monthly Imports Report," and EIA-817, "Monthly Tanker and Barge Movement Report."
- Distillate Fuel Oil has been split into two sulfur categories to meet Environmental Protection Agency requirements effective in October 1993. The new categories for inputs, production, end-of-month stocks and movements are: 0.05% sulfur and under, and greater than 0.05% sulfur. These changes were made to Forms EIA-810, "Monthly Refinery Report," EIA-811, "Monthly Bulk Terminal Report," EIA-812, "Monthly Product Pipeline Report," EIA-814, "Monthly Imports Report," and EIA-817, "Monthly Tanker and Barge Movement Report."
- Other hydrocarbons, hydrogen, and alcohol (Code 090) has been renamed "Other hydrocarbons, hydrogen, and oxygenates" on Form EIA-810, "Monthly Refinery Report." A new line has also been added to report Other hydrocarbons and hydrogen separately.
- Data on inputs and end-of-month stocks of oxygenates (i.e., fuel ethanol, ethyl tertiary butyl ether (ETBE), methanol, methyl tertiary butyl ether (MTBE), tertiary amyl methyl ether (TAME), tertiary butyl alcohol (TBA), and other oxygenates) has been added to Form EIA-810, "Monthly Refinery Report."
- Inputs and production of Isobutylene (Code 634) has been added as sub-categories to Isobutane (Code 615) on Form EIA-810, "Monthly Refinery Report."
- Data on inputs and production of military kerosene-type jet fuel and commercial kerosene-type jet fuel has been added to Form EIA-810, "Monthly Refinery Report."
- Liquefied Petroleum and Refinery Gases column headings for Ethane, Propane, Normal Butane, and Isobutane have been revised to include olefins (e.g., Ethane/Ethylene etc.) on Form EIA-811, "Monthly Bulk Terminal Report."
- Data on end-of-month stocks of oxygenates (i.e., fuel ethanol, ethyl tertiary butyl ether (ETBE), methyl tertiary butyl ether (MTBE), tertiary amyl methyl ether (TAME), tertiary butyl alcohol (TBA), and other oxygenates) have been added to Forms EIA-811,

"Monthly Bulk Terminal Report," and EIA-812, "Monthly Product Pipeline Report." Data for methanol are not collected at this time but has been included on the form for future use.

- Imports of oxygenates (i.e., fuel ethanol, ethyl tertiary butyl ether (ETBE), methyl tertiary butyl ether (MTBE), tertiary amyl methyl ether (TAME), tertiary butyl alcohol (TBA), and other oxygenates) have been added to Form EIA-814, "Monthly Imports Report." Data for methanol are not requested at this time.
- Imports of olefins are collected separately from liquefied petroleum gases (i.e., ethylene, propylene, butylene, and isobutylene) on Form EIA-814, "Monthly Imports Report."
- Data on oxygenates blended into motor gasoline has been eliminated on the Form EIA-819M, "Monthly Oxygenate Telephone Report."
- Data on methanol is no longer required on the Form EIA-819M, "Monthly Oxygenate Telephone Report" but remains on the form for future use.

## Changes in Summary Statistics Tables

- Table S1. Crude and Petroleum Products Overview
  - History data for 1973 through 1980 has been dropped. The table title has been changed to reflect the change in time series.
- Table S2. Crude Oil Supply and Disposition
  - History data for 1973 through 1980 has been dropped. The table title has been changed to reflect the change in time series.
  - The Crude Used Directly column has been eliminated. This column is no longer applicable since the years 1973 through 1980 have been eliminated. The data for 1981 and 1982 are provided in a footnote.
- Table S3. Crude Oil and Petroleum Product Imports
  - History data for 1973 through 1980 has been dropped. The table title has been changed to reflect the change in time series.
  - The Former USSR has been renamed Russia. The remaining states that comprised the Former USSR have been included in the Other Non-OPEC column.



- Table S4. Finished Motor Gasoline Supply and Disposition
    - History data for 1973 through 1980 has been dropped. The table title has been changed to reflect the change in time series.
    - Product supplied-unleaded and product supplied-unleaded (percent of Total) columns have been eliminated. A new column has been added to display end-of-month stocks of oxygenates. These stocks **are not included** in the Total Motor Gasoline end-of-month stocks.
  - Table S5. Distillate Fuel Oil Supply and Disposition
    - History data for 1973 through 1980 has been dropped. The table title has been changed to reflect the change in time series.
    - Distillate fuel oil stocks have been separated into two sulfur categories (0.05% sulfur and under and greater than 0.05% sulfur).
    - The Crude Used Directly column has been eliminated. This column is no longer applicable since the years 1973 through 1980 have been eliminated. The data for 1981 and 1982 are provided in a footnote.
  - Table S6. Residual Fuel Oil Supply and Disposition
    - History data for 1973 through 1980 has been dropped. The table title has been changed to reflect the change in time series.
    - The Crude Used Directly column has been eliminated. This column is no longer applicable since the years 1973 through 1980 have been eliminated. The data for 1981 and 1982 are provided in a footnote.
  - Table S7. Jet Fuel Supply and Disposition
    - History data for 1973 through 1980 has been dropped. The table title has been changed to reflect the change in time series.
  - Table S8. Propane/Propylene Supply and Disposition
    - A new summary table has been added to display supply and disposition data for propane/propylene. This information will continue to be included in the Liquefied Petroleum Gases Supply and Disposition table (renumbered as Table S9).
  - Table S9. Liquefied Petroleum Gases Supply and Disposition
    - Formerly numbered as Table S8.
    - History data for 1973 through 1980 has been dropped. The table title has been changed to reflect the change in time series.
  - Table S10. Other Petroleum Products Supply and Disposition
    - Formerly numbered as Table S9.
    - History data for 1973 through 1980 has been dropped. The table title has been changed to reflect the change in time series.
- Changes in Detailed Statistics Tables**
- Table 1. U.S. Petroleum Balance
    - Line 14 includes fuel ethanol blended into finished motor gasoline. This quantity is comparable to the sum of field production of finished motor gasoline and natural gas liquids and LRGs on Table 2.
    - Line 20 has been modified to read: Other Liquids New Supply (Field Production) to accommodate motor gasoline blending components field production.
  - Tables 2 through 13. Supply and Disposition
    - Isobutane has been renamed Isobutane/Isobutylene under Liquefied Petroleum Gases for clarification.
    - Other Hydrocarbons/Hydrogen/Alcohol has been renamed Other Hydrocarbons/Hydrogen/Oxygenates for clarification.
    - Unleaded and leaded motor gasoline categories have been replaced with the new types of gasolines produced: reformulated, oxygenated, and other.
    - Distillate fuel oil sulfur categories (0.05% sulfur and under and greater than 0.05% sulfur) have been added.
  - Table 16. Refinery Input
    - Other Hydrocarbons/Hydrogen/Alcohol has been renamed Other Hydrocarbons/Hydrogen/Oxygenates for clarification. Sub-categories are displayed for Other Hydrocarbons/Hydrogen and for Oxygenates.

- Oxygenates are displayed separately for fuel ethanol, methanol, MTBE, and other oxygenates. Other oxygenates includes ethyl tertiary butyl ether (ETBE), tertiary amyl methyl alcohol (TAME), tertiary butyl alcohol (TBA), and other aliphatic alcohols and ethers intended for motor gasoline blending (e.g., isopropyl ether (IPE) or n-propanol).
- Table 17. Refinery Net Production
  - Isobutane has been renamed Isobutane/Isobutylene under Liquefied Petroleum Gases for clarification. Isobutylene is displayed as a sub-category to be consistent with the other liquefied gases.
  - Unleaded and leaded motor gasoline categories have been replaced with the new types of gasolines produced: reformulated, oxygenated, and other.
  - Military and commercial kerosene-type jet fuel has been added.
  - Distillate fuel oil sulfur categories (0.05% sulfur and under and greater than 0.05% sulfur) have been added.
- Table 18. Refinery Stocks
  - Isobutane has been renamed Isobutane/Isobutylene under Liquefied Petroleum Gases for clarification.
  - Other Hydrocarbons/Hydrogen/Alcohol has been renamed Other Hydrocarbons/Hydrogen/Oxygenates for clarification. Sub-categories are displayed for Other Hydrocarbons/Hydrogen and for Oxygenates.
  - Oxygenates are displayed separately for fuel ethanol, methanol, MTBE, and other oxygenates. Other oxygenates includes ethyl tertiary butyl ether (ETBE), tertiary amyl methyl alcohol (TAME), tertiary butyl alcohol (TBA), and other aliphatic alcohols and ethers intended for motor gasoline blending (e.g., isopropyl ether (IPE) or n-propanol).
  - Unleaded and leaded motor gasoline categories have been replaced with the new types of gasolines produced: reformulated, oxygenated, and other.
  - Distillate fuel oil sulfur categories (0.05% sulfur and under and greater than 0.05% sulfur) have been added.
- Table 20. Imports by PAD District
  - Data on olefins are displayed separately from liquefied petroleum gases.
- Other Hydrocarbons/Hydrogen/Alcohol has been renamed Other Hydrocarbons/Hydrogen/Oxygenates for clarification. Sub-categories are displayed for Other Hydrocarbons/Hydrogen and for Oxygenates.
- Oxygenates are displayed separately for fuel ethanol, MTBE, and other oxygenates. Other oxygenates includes ethyl tertiary butyl ether (ETBE), tertiary amyl methyl alcohol (TAME), tertiary butyl alcohol (TBA), and other aliphatic alcohols and ethers intended for motor gasoline blending (e.g., isopropyl ether (IPE) or n-propanol).
- Unleaded and leaded motor gasoline categories have been replaced with the new types of gasolines produced: reformulated, oxygenated, and other.
- Distillate fuel oil sulfur categories (0.05% sulfur and under and greater than 0.05% sulfur) have been added to both bonded ship bunkers and other.
- Tables 21-25. Imports by Country of Origin
  - A new line has been added to appear below the Total line to show the sum of the Persian Gulf countries.
  - Former USSR has been changed to read Russia. States formerly included in USSR are now included in the Other countries category under Non-OPEC.
- Table 27. Exports
  - Isobutane has been renamed Isobutane/Isobutylene under Liquefied Petroleum Gases for clarification.
  - Other Hydrocarbons/Oxygenates and Motor Gasoline Blending Components have been added as export products under the Other Liquids category.
- Table 28. Exports by Destination
  - Miscellaneous products category has been renamed Other Products to accommodate exports of other hydrocarbons/ oxygenates and motor gasoline blending components.
- Table 29. Net Imports
  - A new line has been added to appear below the Total line to show the sum of the Persian Gulf countries.
  - Former USSR has been changed to read Russia. States formerly included in USSR are now included in the Other countries category under Non-OPEC.
- Table 30. Stocks



- Other Hydrocarbons/Hydrogen/Alcohol has been renamed Other Hydrocarbons/Hydrogen/Oxygenates for clarification. Sub-categories are displayed for Other hydrocarbons/hydrogen fuel ethanol, ETBE, methanol, MTBE, and other oxygenates.
- Other oxygenates includes tertiary amyl methyl alcohol (TAME), tertiary butyl alcohol (TBA), and other aliphatic alcohols and ethers intended for motor gasoline blending (e.g., isopropyl ether (IPE) or n-propanol).
- Unleaded and leaded motor gasoline categories have been replaced with the new types of gasolines produced: reformulated, oxygenated, and other.
- Distillate fuel oil sulfur categories (0.05% sulfur and under and greater than 0.05% sulfur) have been added.
- Table 31. Refinery, Bulk Terminal, and Natural Gas Plant Stocks
  - Unleaded and leaded motor gasoline categories have been replaced with the new types of gasolines produced: reformulated, oxygenated, and other.
  - Distillate fuel oil sulfur categories (0.05% sulfur and under and greater than 0.05% sulfur) have been added.
- Table 32. Movements by Pipeline, Tanker, and Barge
  - Unleaded and leaded motor gasoline categories have been replaced with the new types of gasolines produced: reformulated, oxygenated, and other.
  - Distillate fuel oil sulfur categories (0.05% sulfur and under and greater than 0.05% sulfur) have been added.
- Table 33. Movements by Pipeline
  - Unleaded and leaded motor gasoline categories have been replaced with the new types of gasolines produced: reformulated, oxygenated, and other.
  - Distillate fuel oil sulfur categories (0.05% sulfur and under and greater than 0.05% sulfur) have been added.
- Table 34. Movements by Tanker and Barge
  - Unleaded and leaded motor gasoline categories have been replaced with the new types of gasolines produced: reformulated, oxygenated, and other.
- Distillate fuel oil sulfur categories (0.05% sulfur and under and greater than 0.05% sulfur) have been added.
- Table 35. Net Movements
  - Isobutane has been renamed Isobutane/Isobutylene under Liquefied Petroleum Gases for clarification.
  - Unleaded and leaded motor gasoline categories have been replaced with the new types of gasolines produced: reformulated, oxygenated, and other.
  - Distillate fuel oil sulfur categories (0.05% sulfur and under and greater than 0.05% sulfur) have been added.

#### Changes in Appendix C (PSM)

- Inputs
  - Other hydrocarbons has been renamed Other Hydrocarbons/ Oxygenates for clarification.
- Production
  - Isobutane has been renamed Isobutane/Isobutylene under Liquefied Petroleum Gases for clarification.
  - Unleaded and leaded motor gasoline categories have been replaced with the new types of gasolines produced: reformulated, oxygenated, and other.
  - A new line has been added to display field production of motor gasoline blending components.
- Imports
  - Isobutane has been renamed Isobutane/Isobutylene under Liquefied Petroleum Gases for clarification.
  - Unleaded and leaded motor gasoline categories have been replaced with the new types of gasolines produced: reformulated, oxygenated, and other.
- Stocks
  - Other hydrocarbons has been renamed Other Hydrocarbons/ Oxygenates for clarification.
  - Isobutane has been renamed Isobutane/Isobutylene under Liquefied Petroleum Gases for clarification.
  - Unleaded and leaded motor gasoline categories have been replaced with the new types of gasolines produced: reformulated, oxygenated, and other.

- Product Supplied

- Isobutane has been renamed Isobutane/Isobutylene under Liquefied Petroleum Gases for clarification.
- Unleaded and leaded motor gasoline categories have been replaced with the new types of gasolines produced: reformulated, oxygenated, and other.

#### Changes in Appendix D

- Table D1. U.S. Summary Table

- Data on oxygenates blended into motor gasoline has been eliminated. This information is no longer collected on the survey EIA-819M, "Monthly Oxygenate Telephone Report."

- Table D2. Monthly Fuel Ethanol Production and Ending Stocks

- Data for the previous year as well as current year are displayed.
- Data on oxygenates blended into motor gasoline has been eliminated. This information is no longer collected on the survey EIA-819M, "Monthly Oxygenate Telephone Report."
- Data for fuel ethanol imports has been dropped due to small volumes reported by respondents.

- Table D3. Monthly MTBE Production and Ending Stocks

- Data for the previous year as well as current year are displayed.
- Data on oxygenates blended into motor gasoline has been eliminated. This information is no longer collected on the survey EIA-819M, "Monthly Oxygenate Telephone Report."
- Data on MTBE imports has been dropped from the table due to small volumes reported by respondents.

### Note 20. 1994 Changes in the Petroleum Supply Reporting System

Effective with January 1994 data, several enhancements were made to the tables to reflect changes in the petroleum industry and to provide more meaningful petroleum statistics. These changes primarily affect data reported for imports, exports, and product supplied.

- On December 31, 1992, Ecuador withdrew as a member of the Organization of Petroleum Exporting Countries (OPEC). As of January 1994, imports of petroleum from Ecuador now appear under imports from Non-OPEC sources. No revision was made to 1993 data. Countries have been realphabetized accordingly. This change is evident in Tables S3 and 35 through 44, 49 and 50.
- Exports data are now published for oxygenates and the sub-categories of finished motor gasoline (reformulated, oxygenated, and other) and distillate fuel oil (0.05% sulfur and under, and greater than 0.05% sulfur).
- Product supplied is now calculated for reformulated, oxygenated, and other finished motor gasoline as well as the sulfur categories of distillate fuel oil (0.05% sulfur and under, and greater than 0.05% sulfur).

### Note 21. 1995 Changes in the Petroleum Supply Reporting System

- Annual U.S. refinery capacity data collection and publication normally presented each year in Volume 1 of the PSA has been moved to a biennial schedule (every other year). Collection and publication of January 1, 1996 refinery capacity data did not occur. The next year collection of refinery capacity data will occur in 1997 and will present refinery capacity data of January 1, 1997.
- Annual U.S. oxygenate production capacity data collection and publication normally presented each year in Volume 1 of the PSA has been eliminated. This information was first collected by EIA to effectively monitor the transition of reformulated motor gasoline into the market.



## Note 22. Motor Gasoline Blending Plants Operating During 1996

Amoco Oil Co. Forest View, IL Milwaukee, WI	Getty Petro. Corp. East Providence, RI New Haven, CT Newark, NJ Rensselaer, NY	Northville Industries Corp. Linden, NJ	Stolthaven Inc. Perth Amboy, NJ
Ashland Oil Inc. Clarksville, IN Covington, KY	Global Petroleum Corp. Revere, MA	Oiltanking Houston Inc. Houston, TX	Texaco Inc. Phoenix, AZ Tucson, AZ
Clark Refg. & Mktg. Inc. Blue Island, IL Milwaukee, WI	Golden West Refining Co. Sante Fe Springs, CA	Phillips 66 Co. Decatur, IL East Chicago, IN	Unocal Corp. Beaumont, TX
Citgo Petroleum Corp. Braintree, MA East Chicago, IN Linden, NJ Milwaukee, WI Mt. Prospect, IL Richmond, VA Selma, NC	Hartford/Woodriver Term. Hartford, IL	Phillips Pipeline Co. Denver, CO. East Saint Louis, IL	Westec Petro. Inc. Denver, CO
	Int'l Matex Tank Term. Bayonne, NJ	Santa Fe Pacific Pipeline Phoenix, AZ	Westfrac Inc. Blending Grand Junction, CO
	Itochu International Inc. Sewaren, NJ	Shell Oil Co. Argo, IL Carson, CA Des Plaines, IL	Wickland Oil Co. Crockett, CA
Coastal Corp. Hartford, IL Wichita, KS	Marathon Oil Co. Hammond, IN Mt. Prospect, IL Willow Springs, IL	Sinclair Oil Corp. Denver, CO	Williams Pipeline Co. Des Moines, IA Iowa City, IA
GATX Terminals Corp. Cateret, NJ Pasadena, TX Staten Island, NY	Mobil Oil Corp. Arlington Heights, IL Hammond, IN	ST Services Jacksonville, FL	



## Appendix C

### 1995 Revised Crude Oil Production



*Surface aerators are used at U.S. petroleum refineries to help prevent water pollution. These aerators speed up the oxidation process by beating air into water.*



## Appendix C

**Table C1. Revised<sup>a</sup> Crude Oil Production by PAD District and State, 1995**  
(Thousand Barrels)

PAD District and State	January	February	March	April	May	June	July
<b>PAD District I.....</b>	<b>846</b>	<b>788</b>	<b>915</b>	<b>870</b>	<b>884</b>	<b>877</b>	<b>829</b>
Florida.....	513	473	520	502	490	487	478
New York.....	20	19	22	28	26	25	28
Pennsylvania.....	157	138	179	164	182	180	158
Virginia.....	1	1	2	1	1	1	1
West Virginia.....	156	157	192	175	185	184	164
<b>PAD District II.....</b>	<b>18,036</b>	<b>16,667</b>	<b>18,098</b>	<b>17,428</b>	<b>17,687</b>	<b>17,328</b>	<b>16,985</b>
Illinois.....	1,389	1,226	1,454	1,337	1,369	1,336	1,353
Indiana.....	389	199	226	208	224	214	220
Kansas.....	3,826	3,585	3,836	3,642	3,671	3,637	3,594
Kentucky.....	332	388	210	326	292	424	119
Michigan.....	955	932	1,022	970	995	941	947
Missouri.....	9	9	10	10	12	10	11
Nebraska.....	339	308	334	320	322	310	309
North Dakota.....	2,553	2,194	2,479	2,508	2,498	2,345	2,418
Ohio.....	673	647	780	690	739	707	641
Oklahoma.....	7,415	7,041	7,586	7,271	7,416	7,265	7,232
South Dakota.....	124	110	121	116	114	110	112
Tennessee.....	32	29	38	29	34	29	29
<b>PAD District III.....</b>	<b>97,552</b>	<b>88,853</b>	<b>97,307</b>	<b>94,927</b>	<b>99,214</b>	<b>94,724</b>	<b>97,918</b>
Alabama.....	1,608	1,467	1,606	1,560	1,654	1,500	1,620
Arkansas.....	723	649	727	696	710	675	880
Louisiana <sup>b</sup> .....	10,602	9,677	10,730	10,477	11,074	10,945	11,120
Mississippi.....	1,681	1,518	1,684	1,652	1,684	1,611	1,649
New Mexico.....	5,452	5,092	5,839	5,421	5,729	5,356	5,512
Texas <sup>b</sup> .....	49,056	44,190	48,412	46,718	47,723	45,603	46,687
Federal Offshore Padd III.....	28,430	26,260	28,309	28,403	30,640	29,034	30,450
<b>PAD District IV.....</b>	<b>12,460</b>	<b>13,062</b>	<b>12,158</b>	<b>11,836</b>	<b>12,131</b>	<b>11,831</b>	<b>11,938</b>
Colorado.....	2,589	2,340	2,598	2,493	2,527	2,394	2,331
Montana.....	1,419	1,291	1,431	1,380	1,402	1,353	1,393
Utah.....	1,740	1,553	1,735	1,730	1,726	1,603	1,640
Wyoming.....	6,712	7,879	6,394	6,232	6,477	6,481	6,573
<b>PAD District V.....</b>	<b>78,518</b>	<b>71,115</b>	<b>76,950</b>	<b>73,962</b>	<b>76,746</b>	<b>73,631</b>	<b>73,156</b>
Alaska <sup>b</sup> .....	48,819	44,178	47,262	45,334	47,051	44,510	43,444
South Alaska.....	1,316	1,183	1,317	1,268	1,248	1,215	1,360
North Slope.....	7,502	42,995	45,945	44,066	45,802	43,295	42,084
Arizona.....	4	5	6	5	5	7	7
California <sup>b</sup> .....	23,651	21,273	23,395	22,880	23,741	22,931	23,529
Nevada.....	133	118	122	113	115	109	111
Federal Offshore Padd V.....	5,911	5,542	6,165	5,631	5,835	6,075	6,064
<b>U.S. Total<sup>b</sup>.....</b>	<b>207,413</b>	<b>190,484</b>	<b>205,428</b>	<b>199,024</b>	<b>206,663</b>	<b>198,391</b>	<b>200,826</b>
<b>Daily Average<sup>b</sup>.....</b>	<b>6,691</b>	<b>6,568</b>	<b>6,627</b>	<b>6,634</b>	<b>6,667</b>	<b>6,613</b>	<b>6,478</b>

This table contains updates on 1995 crude oil production statistics published in the *Petroleum Supply Annual (PSA)*, 1995.

Statistics on crude oil production for States and for Federal offshore areas are reported to the Energy Information Administration (EIA) by State government agencies and by the Minerals Management Service, U.S. Department of the Interior. These data are updated periodically by the reporting agencies and are received by the EIA on an ongoing basis. At the time of publication of the 1995 *PSA*, the EIA had not received complete and/or updated statistics on crude oil production for several States. This table is provided to inform the user of updated monthly and annual crude oil production statistics for 1995, and are not subject to further revision by the EIA.

**Table C1. Revised<sup>a</sup> Crude Oil Production by PAD District and State, 1995 (Continued)**  
(Thousand Barrels)

PAD District and State	August	September	October	November	December	Total	Daily Average
<b>PAD District I</b> .....	<b>794</b>	<b>803</b>	<b>787</b>	<b>746</b>	<b>731</b>	<b>9,870</b>	<b>27</b>
Florida.....	449	446	425	443	455	5,682	16
New York.....	25	31	30	25	27	304	1
Pennsylvania.....	155	173	179	152	122	1,939	5
Virginia.....	1	0	1	1	1	13	(s)
West Virginia.....	164	153	152	125	125	1,933	5
<b>PAD District II</b> .....	<b>17,782</b>	<b>16,863</b>	<b>17,485</b>	<b>17,136</b>	<b>16,917</b>	<b>208,414</b>	<b>571</b>
Illinois.....	1,408	1,348	1,357	1,332	1,281	16,190	44
Indiana.....	229	211	230	217	208	2,778	8
Kansas.....	3,754	3,512	3,591	3,522	3,446	43,616	119
Kentucky.....	314	362	289	297	139	3,492	10
Michigan.....	994	930	885	876	937	11,383	31
Missouri.....	10	11	8	10	9	120	(s)
Nebraska.....	318	308	315	302	307	3,794	10
North Dakota.....	2,494	2,418	2,526	2,470	2,553	29,458	81
Ohio.....	708	672	699	670	631	8,258	23
Oklahoma.....	7,409	6,950	7,441	7,300	7,265	87,591	240
South Dakota.....	114	109	110	106	106	1,352	4
Tennessee.....	30	31	35	33	34	382	1
<b>PAD District III</b> .....	<b>96,041</b>	<b>94,041</b>	<b>94,319</b>	<b>96,005</b>	<b>98,640</b>	<b>1,149,543</b>	<b>3,149</b>
Alabama.....	1,557	1,552	1,536	1,534	1,536	18,731	51
Arkansas.....	778	706	744	733	847	8,867	24
Louisiana <sup>b</sup> .....	11,233	10,804	11,370	11,157	11,691	130,881	359
Mississippi.....	1,696	1,636	1,732	1,675	1,692	19,912	55
New Mexico.....	5,632	5,218	5,392	5,309	5,486	65,439	179
Texas <sup>b</sup> .....	46,603	45,169	47,264	45,941	46,855	560,221	1,535
Federal Offshore Padd III.....	28,542	28,955	26,281	29,656	30,533	345,491	947
<b>PAD District IV</b> .....	<b>11,807</b>	<b>11,595</b>	<b>11,917</b>	<b>11,483</b>	<b>11,801</b>	<b>144,018</b>	<b>395</b>
Colorado.....	2,336	2,217	2,311	2,231	2,251	28,617	78
Montana.....	1,408	1,365	1,401	1,326	1,359	16,529	45
Utah.....	1,620	1,609	1,691	1,652	1,687	19,988	55
Wyoming.....	6,443	6,403	6,514	6,274	6,503	78,884	216
<b>PAD District V</b> .....	<b>74,534</b>	<b>70,157</b>	<b>75,871</b>	<b>73,405</b>	<b>75,711</b>	<b>893,755</b>	<b>2,449</b>
Alaska <sup>b</sup> .....	44,391	41,323	45,727	44,155	45,461	541,654	1,484
South Alaska.....	1,386	1,318	1,345	1,275	1,283	15,514	43
North Slope.....	43,005	40,005	44,382	42,879	44,178	526,139	1,441
Arizona.....	7	7	7	6	6	71	(s)
California <sup>b</sup> .....	23,714	22,981	23,905	23,100	23,866	278,965	764
Nevada.....	110	102	105	102	103	1,342	4
Federal Offshore Padd V.....	6,312	5,744	6,127	6,042	6,277	71,724	197
<b>U.S. Total<sup>b</sup></b> .....	<b>200,958</b>	<b>193,459</b>	<b>200,378</b>	<b>198,775</b>	<b>203,800</b>	<b>2,405,600</b>	<b>6,591</b>
<b>Daily Average<sup>b</sup></b> .....	<b>6,483</b>	<b>6,449</b>	<b>6,464</b>	<b>6,626</b>	<b>6,574</b>	<b>6,573</b>	<b>-</b>

<sup>a</sup> Data are based upon revisions received as of May 1997.

<sup>b</sup> Includes the following offshore production (thousand barrels): Alaska: State - 96,134; California: State - 19,894; Louisiana: State - 23,605; Texas: State - 1,318; U.S. Total, including Federal Offshore - 558,167.

Note: • Production data are revised from those published in the Petroleum Supply Annual 1995 for the following States: Arkansas, California, Colorado, Federal Offshore PAD District III, Federal Offshore PAD District V, Florida, Kansas, Louisiana, Mississippi, New Mexico, North Dakota, Oklahoma, South Dakota, Texas, Virginia, and West Virginia. • Annual crude oil production for Michigan, New York, Ohio and West Virginia was prorated by month based on first purchaser monthly crude oil volumes collected on Form EIA-182, "Domestic Crude oil First Purchase Report." New Mexico, and Pennsylvania data are based on EIA estimate from form EIA-182. • Totals may not equal sum of components due to independent rounding.

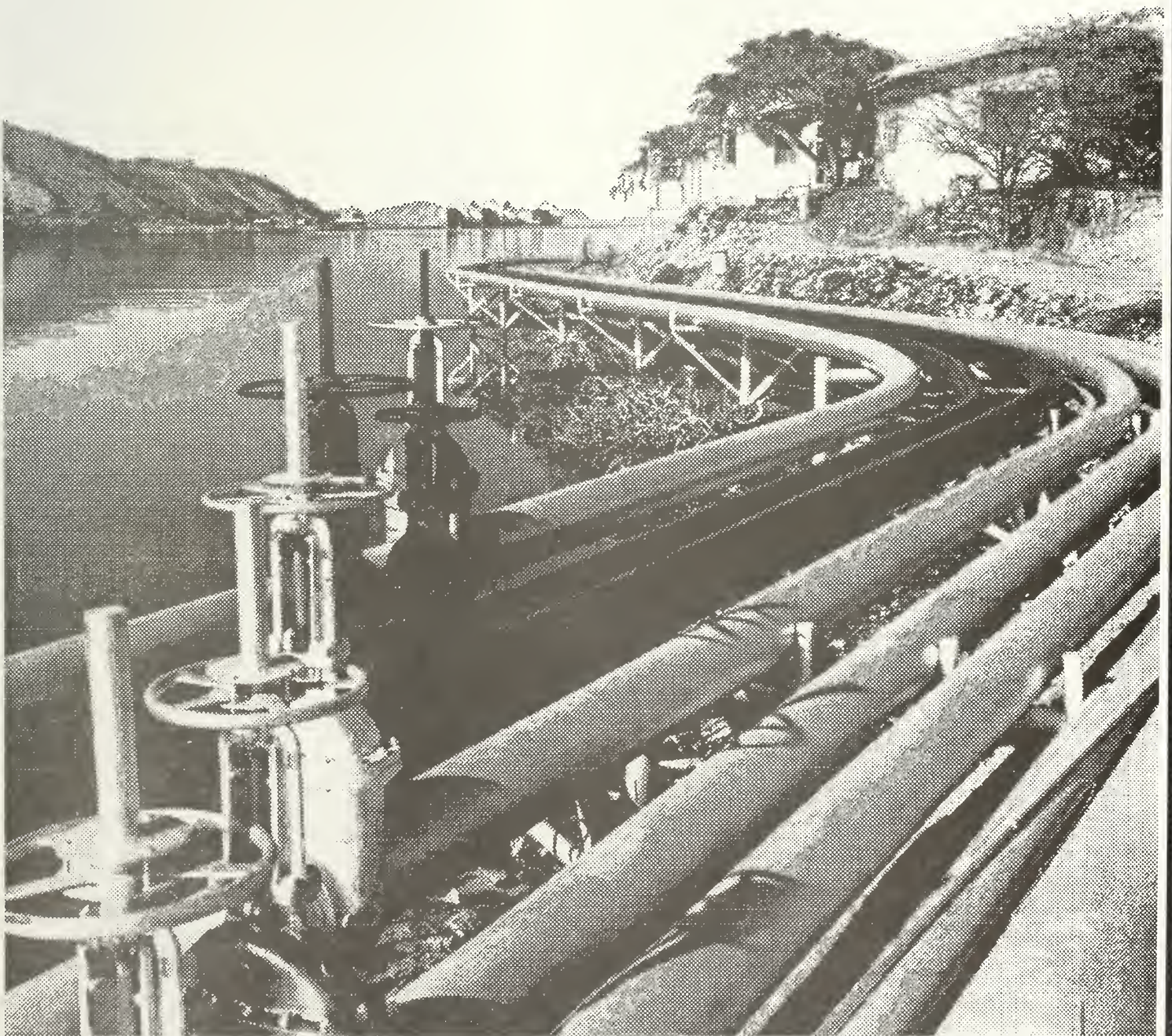
Source: State Conservation agencies, U.S. Department of the Interior, Minerals Management Service and the Conservation Committee of California Oil and Gas Producers.







## Glossary



*Pipelines carry natural gas across geographic regions.*





# Definitions of Petroleum Products and Other Terms

**Alcohol.** The family name of a group of organic chemical compounds composed of carbon, hydrogen, and oxygen. The series of molecules vary in chain length and are composed of a hydrocarbon plus a hydroxyl group;  $\text{CH}_3\text{-(CH}_2\text{)}_n\text{-OH}$  (e.g., methanol, ethanol, and tertiary butyl alcohol).

**Alkylate.** The product of an alkylation reaction. It usually refers to the high octane product from alkylation units. This alkylate is used in blending high octane gasoline.

**Alkylation.** A refining process for chemically combining isobutane with olefin hydrocarbons (e.g., propylene, butylene) through the control of temperature and pressure in the presence of an acid catalyst, usually sulfuric acid or hydrofluoric acid. The product, alkylate, an isoparaffin, has high octane value and is blended with motor and aviation gasoline to improve the antiknock value of the fuel.

**API Gravity.** An arbitrary scale expressing the gravity or density of liquid petroleum products. The measuring scale is calibrated in terms of degrees API; it may be calculated in terms of the following formula:

$$\text{Degrees API} = \frac{141.5}{\text{sp.gr.}_{60^\circ\text{F}}/60^\circ\text{F}} - 131.5$$

**The higher the API gravity, the lighter the compound. Light crudes generally exceed 38 degrees API and heavy crudes are commonly labeled as all crudes with an API gravity of 22 degrees or below. Intermediate crudes fall in the range of 22 degrees to 38 degrees API gravity.**

**Aromatics.** Hydrocarbons characterized by unsaturated ring structures of carbon atoms. Commercial petroleum aromatics are benzene, toluene, and xylene (BTX).

**Asphalt.** A dark-brown-to-black cement-like material containing bitumens as the predominant constituent obtained by petroleum processing. The definition includes crude asphalt as well as the following finished products: cements, fluxes, the asphalt content of emulsions (exclusive of water), and petroleum distillates blended with asphalt to make cutback asphalts. The conversion factor for asphalt is 5.5 barrels per short ton.

**ASTM.** The acronym for the American Society for Testing and Materials.

**Shaded areas in definitions represent changes introduced in November 1995.**

**Atmospheric Crude Oil Distillation.** The refining process of separating crude oil components at atmospheric pressure by heating to temperatures of about 600° to 750° F (depending on the nature of the crude oil and desired products) and subsequent condensing of the fractions by cooling.

**Aviation Gasoline (Finished).** All special grades of gasoline for use in aviation reciprocating engines, as given in ASTM Specification D910 and Military Specification MIL-G-5572. Excludes blending components which will be used in blending or compounding into finished aviation gasoline.

**Aviation Gasoline Blending Components.** Naphthas which will be used for blending or compounding into finished aviation gasoline (e.g., straight-run gasoline, alkylate, reformat, benzene, toluene, and xylene). Excludes oxygenates (alcohols, ethers), butane, and pentanes plus. Oxygenates are reported as other hydrocarbons, hydrogen, and oxygenates.

**Barrel.** A volumetric unit of measure for crude oil and petroleum products equivalent to 42 U.S. gallons. This measure is used in most statistical reports. Factors for converting petroleum coke, asphalt, still gas and wax to barrels are given in the definitions of these products.

**Barrels Per Calendar Day.** The maximum number of barrels of input that can be processed during a 24-hour period after making allowances for the following limitations:

the capability of downstream facilities to absorb the output of crude oil processing facilities of a given refinery. No reduction is made when a planned distribution of intermediate streams through other than downstream facilities is part of a refinery's normal operation;

the types and grades of inputs to be processed;

the types and grades of products expected to be manufactured;

the environmental constraints associated with refinery operations;

the reduction of capacity for scheduled downtime such as routine inspection, mechanical problems, maintenance, repairs, and turnaround; and



the reduction of capacity for unscheduled downtime such as mechanical problems, repairs, and slowdowns.

**Barrels Per Stream Day.** The amount a unit can process running at full capacity under optimal crude oil and product slate conditions.

**Benzene (C<sub>6</sub>H<sub>6</sub>).** An aromatic hydrocarbon present in small proportion in some crude oils and made commercially from petroleum by the catalytic reforming of naphthenes in petroleum naphtha. Also made from coal in the manufacture of coke. Used as a solvent, in manufacturing detergents, synthetic fibers, and petrochemicals and as a component of high-octane gasoline.

**Blending Components.** See Motor or Aviation Gasoline Blending Components.

**Blending Plant.** A facility which has no refining capability but is either capable of producing finished motor gasoline through mechanical blending or blends oxygenates with motor gasoline.

**Bonded Petroleum Imports.** Petroleum imported and entered into Customs bonded storage. These imports are not included in the import statistics until they are: (1) withdrawn from storage free of duty for use as fuel for vessels and aircraft engaged in international trade; or (2) withdrawn from storage with duty paid for domestic use.

**BTX.** The acronym for the commercial petroleum aromatics benzene, toluene, and xylene. See individual categories for definitions.

**Bulk Station.** A facility used primarily for the storage and/or marketing of petroleum products which has a total bulk storage capacity of less than 50,000 barrels and receives its petroleum products by tank car or truck.

**Bulk Terminal.** A facility used primarily for the storage and/or marketing of petroleum products which has a total bulk storage capacity of 50,000 barrels or more and/or receives petroleum products by tanker, barge, or pipeline.

**Butane (C<sub>4</sub>H<sub>10</sub>).** A normally gaseous straight-chain or branch-chain hydrocarbon extracted from natural gas or refinery gas streams. It includes isobutane and normal butane and is designated in ASTM Specification D1835 and Gas Processors Association Specifications for commercial butane.

**Isobutane (C<sub>4</sub>H<sub>10</sub>).** A normally gaseous branch-chain hydrocarbon. It is a colorless paraffinic gas that boils at a temperature of 10.9° F. It is extracted from natural gas or refinery gas streams.

**Normal Butane (C<sub>4</sub>H<sub>10</sub>).** A normally gaseous straight-chain hydrocarbon. It is a colorless paraffinic gas that boils at a temperature of 31.1° F. It is extracted from natural gas or refinery gas streams.

**Butylene (C<sub>4</sub>H<sub>8</sub>).** An olefinic hydrocarbon recovered from refinery processes.

**Captive Refinery Oxygenate Plants.** Oxygenate production facilities located within or adjacent to a refinery complex.

**Catalytic Cracking.** The refining process of breaking down the larger, heavier, and more complex hydrocarbon molecules into simpler and lighter molecules. Catalytic cracking is accomplished by the use of a catalytic agent and is an effective process for increasing the yield of gasoline from crude oil. Catalytic cracking processes fresh feeds and recycled feeds.

**Fresh Feeds.** Crude oil or petroleum distillates which are being fed to processing units for the first time.

**Recycled Feeds.** Feeds that are continuously fed back for additional processing.

**Catalytic Hydrocracking.** A refining process that uses hydrogen and catalysts with relatively low temperatures and high pressures for converting middle boiling or residual material to high-octane gasoline, reformer charge stock, jet fuel, and/or high grade fuel oil. The process uses one or more catalysts, depending upon product output, and can handle high sulfur feedstocks without prior desulfurization.

**Catalytic Hydrotreating.** A refining process for treating petroleum fractions from atmospheric or vacuum distillation units (e.g., naphthas, middle distillates, reformer feeds, residual fuel oil, and heavy gas oil) and other petroleum (e.g., cat cracked naphtha, coker naphtha, gas oil, etc.) in the presence of catalysts and substantial quantities of hydrogen. Hydrotreating includes desulfurization, removal of substances (e.g., nitrogen compounds) that deactivate catalysts, conversion of olefins to paraffins to reduce gum formation in gasoline, and other processes to upgrade the quality of the fractions.

**Catalytic Reforming.** A refining process using controlled heat and pressure with catalysts to rearrange certain hydrocarbon molecules, thereby converting paraffinic and naphthenic type hydrocarbons (e.g., low-octane gasoline boiling range fractions) into petrochemical feedstocks and higher octane stocks suitable for blending into finished gasoline. Catalytic reforming is reported in two categories. They are:

**Low Pressure.** A processing unit operating at less than 225 pounds per square inch gauge (PSIG) measured at the outlet separator.

**High Pressure.** A processing unit operating at either equal to or greater than 225 pounds per square inch gauge (PSIG) measured at the outlet separator.

**Charge Capacity.** The input (feed) capacity of the refinery processing facilities.

**Coal.** A black or brownish-black solid combustible substance formed by the partial decomposition of vegetable matter without access to air. The rank of coal, which includes anthracite, bituminous coal, subbituminous coal, and lignite, is based on fixed carbon, volatile matter, and heating value. Coal rank indicates the progressive alteration, or coalification, from lignite to anthracite. Lignite contains approximately 9 to 17 million BTU per ton. The heat contents of subbituminous and bituminous coal range from 16 to 24 million BTU per ton, and from 19 to 30 million BTU per ton, respectively. Anthracite contains approximately 22 to 28 million BTU per ton.

**Commercial Kerosene-Type Jet Fuel.** See **Kerosene-Type Jet Fuel**.

**Crude Oil (Including Lease Condensate).** A mixture of hydrocarbons that exists in liquid phase in underground reservoirs and remains liquid at atmospheric pressure after passing through surface-separating facilities. Included are lease condensate and liquid hydrocarbons produced from tar sands, gilsonite, and oil shale. Drip gases are also included, but topped crude oil (residual oil) and other unfinished oils are excluded. Liquids produced at natural gas processing plants and mixed with crude oil are likewise excluded where identifiable. Crude oil is considered as either domestic or foreign, according to the following:

**Domestic.** Crude oil produced in the United States or from its "outer continental shelf" as defined in 43 USC 1331.

**Foreign.** Crude oil produced outside the United States. Imported Athabasca hydrocarbons (**tar sands from Canada**) are included.

**Crude Oil, Refinery Receipts.** Receipts of domestic and foreign crude oil at a refinery. Includes all crude oil in transit except crude oil in transit by pipeline. Foreign crude oil is reported as a receipt only after entry through customs. Crude oil of foreign origin held in bonded storage is excluded.

**Crude Oil Losses.** Represents the volume of crude oil reported by petroleum refineries as being lost in their

operations. These losses are due to spills, contamination, fires, etc. as opposed to refinery processing losses.

**Crude Oil Production.** The volume of crude oil produced from oil reservoirs during given periods of time. The amount of such production for a given period is measured as volumes delivered from lease storage tanks (i.e., the point of custody transfer) to pipelines, trucks, or other media for transport to refineries or terminals with adjustments for (1) net differences between opening and closing lease inventories, and (2) basic sediment and water (BS&W).

**Crude Oil Qualities.** Refers to two properties of crude oil, the sulfur content and API gravity, which affect processing complexity and product characteristics.

**Delayed Coking.** A process by which heavier crude oil fractions can be thermally decomposed under conditions of elevated temperatures and pressure to produce a mixture of lighter oils and petroleum coke. The light oils can be processed further in other refinery units to meet product specifications. The coke can be used either as a fuel or in other applications such as the manufacturing of steel or aluminum.

**Disposition.** The components of petroleum disposition are stock change, crude oil losses, refinery inputs, exports, and products supplied for domestic consumption.

**Distillate Fuel Oil.** A general classification for one of the petroleum fractions produced in conventional distillation operations. It is used primarily for space heating, on-and-off-highway diesel engine fuel (including railroad engine fuel and fuel for agricultural machinery), and electric power generation. Included are products known as No. 1, No. 2, and No. 4 fuel oils; No. 1, No. 2, and No. 4 diesel fuels. **Distillate fuel oil is reported in the following sulfur categories: 0.05% sulfur and under, for use in on-highway diesel engines which could be described as meeting EPA regulations; and greater than 0.05% sulfur, for use in all other distillate applications.**

**No. 1 Distillate.** A petroleum distillate which meets the specifications for No. 1 heating or fuel oil as defined in ASTM D 396 and/or the specifications for No. 1 diesel fuel as defined in ASTM Specification D 975 with distillation temperatures of 420° F at the 10-percent recovery point and 550° F at the 90-percent recovery point, and kinematic viscosities between 1.4 and 2.2 centistokes at 100° F.

**No. 2 Distillate.** A petroleum distillate which meets the specifications for No. 2 heating or fuel oil as defined in ASTM D 396 and/or the specifications for No. 2 diesel fuel as defined in ASTM Specification D 975 with distillation temperatures of 540° and 640° F at the 90-



percent recovery point, and kinematic viscosities between 2.0 and 4.3 centistokes at 100° F.

**No. 4 Fuel Oil.** A fuel oil for commercial burner installations not equipped with preheating facilities. It is used extensively in industrial plants. This grade is a blend of distillate fuel oil and residual fuel oil stocks that conforms to ASTM Specification D396 or Federal Specification VV-F-815C; with minimum and maximum kinematic viscosities between 5.8 and 26.4 centistokes at 100° F. Also included is No. 4-D, a fuel oil for low and medium-speed diesel engines that conforms to ASTM Specification D975.

**Electricity (Purchased).** Electricity purchased for refinery operations that is not produced within the refinery complex.

**Ending Stocks.** Primary stocks of crude oil and petroleum products held in storage as of 12 midnight on the last day of the month. Primary stocks include crude oil or petroleum products held in storage at (or in) leases, refineries, natural gas processing plants, pipelines, tank farms, and bulk terminals that can store at least 50,000 barrels of petroleum products or that can receive petroleum products by tanker, barge, or pipeline. Crude oil that is in-transit by water from Alaska, or that is stored on Federal leases or in the Strategic Petroleum Reserve is included. Primary Stocks exclude stocks of foreign origin that are held in bonded warehouse storage.

**ETBE (Ethyl tertiary butyl ether) (CH<sub>3</sub>)<sub>3</sub>COC<sub>2</sub>H<sub>5</sub>.** An oxygenate blend stock formed by the catalytic etherification of isobutylene with ethanol.

**Ethane (C<sub>2</sub>H<sub>6</sub>).** A normally gaseous straight-chain hydrocarbon. It is a colorless paraffinic gas that boils at a temperature of -127.48° F. It is extracted from natural gas and refinery gas streams.

**Ether.** A generic term applied to a group of organic chemical compounds composed of carbon, hydrogen, and oxygen, characterized by an oxygen atom attached to two carbon atoms (e.g., methyl tertiary butyl ether).

**Ethylene (C<sub>2</sub>H<sub>4</sub>).** An olefinic hydrocarbon recovered from refinery processes or petrochemical processes.

**Exports.** Shipments of crude oil and petroleum products from the 50 States and the District of Columbia to foreign countries, Puerto Rico, the Virgin Islands, and other U.S. possessions and territories.

**Field Production.** Represents crude oil production on leases, natural gas liquids production at natural gas processing plants, new supply of other hydrocarbons/

oxygenates and motor gasoline blending components, and fuel ethanol blended into finished motor gasoline.

**Flexicoking.** A thermal cracking process which converts heavy hydrocarbons such as crude oil, tar sands bitumen, and distillation residues into light hydrocarbons. Feedstocks can be any pumpable hydrocarbons including those containing high concentrations of sulfur and metals.

**Fluid Coking.** A thermal cracking process utilizing the fluidized-solids technique to remove carbon (coke) for continuous conversion of heavy, low-grade oils into lighter products.

**Fresh Feed Input.** Represents input of material (crude oil, unfinished oils, natural gas liquids, other hydrocarbons and oxygenates or finished products) to processing units at a refinery that is being processed (input) into a particular unit for the first time.

Examples:

(1) Unfinished oils coming out of a crude oil distillation unit which are input into a catalytic cracking unit are considered fresh feed to the catalytic cracking unit.

(2) Unfinished oils coming out of a catalytic cracking unit being looped back into the same catalytic cracking unit to be reprocessed are not considered fresh feed.

**Fuel Ethanol (C<sub>2</sub>H<sub>5</sub>OH).** An anhydrous denatured aliphatic alcohol intended for gasoline blending as described in Oxygenates definition.

**Fuels Solvent Deasphalting.** A refining process for removing asphalt compounds from petroleum fractions, such as reduced crude oil. The recovered stream from this process is used to produce fuel products.

**Gas Oil.** A liquid petroleum distillate having a viscosity intermediate between that of kerosene and lubricating oil. It derives its name from having originally been used in the manufacture of illuminating gas. It is now used to produce distillate fuel oils and gasoline.

**Gasohol.** A blend of finished motor gasoline and alcohol (generally ethanol but sometimes methanol), limited to 10 percent by volume of alcohol.

**Gasoline Blending Components.** Naphthas which will be used for blending or compounding into finished aviation or motor gasoline (e.g., straight-run gasoline, alkylate, reformate, benzene, toluene, and xylene). Excludes oxygenates (alcohols, ethers), butane, and pentanes plus.

**Gross Input to Atmospheric Crude Oil Distillation Units.** Total input to atmospheric crude oil distillation units. Includes all crude oil, lease condensate, natural gas plant liquids, unfinished oils, liquefied refinery gases, slop oils, and other liquid hydrocarbons produced from tar sands, gilsonite, and oil shale.

**Heavy Gas Oil.** Petroleum distillates with an approximate boiling range from 651° to 1000° F.

**Hydrogen.** The lightest of all gases, occurring chiefly in combination with oxygen in water; exists also in acids, bases, alcohols, petroleum, and other hydrocarbons.

**Idle Capacity.** The component of operable capacity that is not in operation and not under active repair, but capable of being placed in operation within 30 days; and capacity not in operation but under active repair that can be completed within 90 days.

**Imported Crude Oil Burned As Fuel.** The amount of foreign crude oil burned as a fuel oil, usually as residual fuel oil, without being processed as such. Imported crude oil burned as fuel includes lease condensate and liquid hydrocarbons produced from tar sands, gilsonite, and oil shale.

**Imports.** Receipts of crude oil and petroleum products into the 50 States and the District of Columbia from foreign countries, Puerto Rico, the Virgin Islands, and other U.S. possessions and territories.

**Isobutane.** See **Butane**.

**Isobutylene (C<sub>4</sub>H<sub>8</sub>).** An olefinic hydrocarbon recovered from refinery processes or petrochemical processes.

**Isohexane (C<sub>6</sub>H<sub>14</sub>).** A saturated branch-chain hydrocarbon. It is a colorless liquid that boils at a temperature of 156.2° F.

**Isomerization.** A refining process which alters the fundamental arrangement of atoms in the molecule without adding or removing anything from the original material. Used to convert normal butane into isobutane (C<sub>4</sub>), an alkylation process feedstock, and normal pentane and hexane into isopentane (C<sub>5</sub>) and isohexane (C<sub>6</sub>), high-octane gasoline components.

**Isopentane.** See **Natural Gasoline and Isopentane**.

**Kerosene.** A petroleum distillate that has a maximum distillation temperature of 401° F at the 10-percent recovery point, a final boiling point of 572° F, and a minimum flash point of 100° F. Included are the two grades designated in ASTM D3699: No. 1-K and No. 2-K, and all grades of kerosene called range or stove oil.

Kerosene is used in space heaters, cook stoves, and water heaters and is suitable for use as an illuminant when burned in wick lamps.

**Kerosene-Type Jet Fuel.** A quality kerosene product with a maximum distillation temperature of 400° F at the 10-percent recovery point and a final maximum boiling point of 572° F. The fuel is designated in ASTM Specification D1655 and Military Specifications MIL-T-5624R and MIL-T-83133D (Grades JP-5 and JP-8). A relatively low-freezing point distillate of the kerosene type used primarily for turbojet and turboprop aircraft engines.

**Commercial.** Kerosene-type jet fuel intended for use in commercial aircraft.

**Military.** Kerosene-type jet fuel intended for use in military aircraft.

**Lease Condensate.** A natural gas liquid recovered from gas well gas (associated and non-associated) in lease separators or natural gas field facilities. Lease condensate consists primarily of pentanes and heavier hydrocarbons.

**Light Gas Oils.** Liquid petroleum distillates heavier than naphtha, with an approximate boiling range from 401° F to 650° F.

**Liquefied Petroleum Gases (LPG).** Ethane, ethylene, propane, propylene, normal butane, butylene, isobutane, and isobutylene produced at refineries or natural gas processing plants, including plants that fractionate raw natural gas plant liquids.

**Liquefied Refinery Gases (LRG).** Liquefied petroleum gases fractionated from refinery or still gases. Through compression and/or refrigeration, they are retained in the liquid state. The reported categories are ethane/ethylene, propane/propylene, normal butane/butylene, and isobutane/isobutylene. Excludes still gas.

**Lubricants.** A substance used to reduce friction between bearing surfaces or as process materials either incorporated into other materials used as processing aids in the manufacturing of other products, or as carriers of other materials. Petroleum lubricants may be produced either from distillates or residues. Other substances may be added to impart or improve certain required properties. Do not include byproducts of lubricating oil refining such as aromatic extracts derived from solvent extraction or tars derived from deasphalting. "Lubricants" includes all grades of lubricating oils from spindle oil to cylinder oil and those used in greases. Reporting categories include:

**Paraffinic.** Includes all grades of bright stock and neutrals with a Viscosity Index > 75.



**Naphthenic.** Includes all lubricating oil base stocks with a Viscosity Index < 75.

**Note:** The criterion for categorizing the lubricants is based solely on the Viscosity Index of the stocks and is independent of crude sources and type of processing used to produce the oils.

**Exceptions:** Lubricating oil base stocks that have been historically classified as naphthenic or paraffinic by a refiner may continue to be so categorized irrespective of the Viscosity Index criterion.

Example:

(1) Unextracted paraffinic oils that would not meet the Viscosity Index test.

**Merchant Oxygenate Plants.** Oxygenate production facilities that are not associated with a petroleum refinery. Production from these facilities is sold under contract or on the spot market to refiners or other gasoline blenders.

**Methanol (CH<sub>3</sub>OH).** A light, volatile alcohol intended for gasoline blending as described in Oxygenate definition.

**Middle Distillates.** A general classification of refined petroleum products that includes distillate fuel oil and kerosene.

**Military Kerosene-Type Jet Fuel.** See **Kerosene-Type Jet Fuel.**

**Miscellaneous Products.** Includes all finished products not classified elsewhere (e.g., petrolatum, lube refining byproducts (aromatic extracts and tars), absorption oils, ram-jet fuel, petroleum rocket fuels, synthetic natural gas feedstocks, and specialty oils).

**Motor Gasoline (Finished).** A complex mixture of relatively volatile hydrocarbons, with or without small quantities of additives, that has been blended to form a fuel suitable for use in spark-ignition engines. Motor gasoline, as given in ASTM Specification D-4814 or Federal Specification VV-G-1690C, includes a range in distillation temperatures from 122 degrees to 158 degrees F at the 10-percent recovery point and from 365 degrees to 374 degrees F at the 90-percent recovery point. "Motor gasoline" includes reformulated gasoline, oxygenated gasoline, and other finished gasoline. Blendstock is excluded until blending has been completed.

**Reformulated Gasoline.** Gasoline formulated for use in motor vehicles, the composition and properties of which meet the requirements of the reformulated gasoline regulations promulgated by the U.S. Environ-

mental Protection Agency under Section 211K of the Clean Air Act. Includes oxygenated fuels program reformulated gasoline (OPRG). Excludes reformulated gasoline blendstock for oxygenate blending (RBOB).

**Oxygenated Gasoline.** Gasoline formulated for use in motor vehicles that has an oxygen content of 1.8 percent or higher, by weight. Includes gasohol. Excludes reformulated gasoline, oxygenated fuels program reformulated gasoline (OPRG) and reformulated gasoline blendstock for oxygenate blending (RBOB).

**OPRG.** "Oxygenated Fuels Program Reformulated Gasoline" is reformulated gasoline which is intended for use in an oxygenated fuels program control period.

**Other Finished or Conventional Gasoline.** Motor gasoline not included in the oxygenated or reformulated gasoline categories. Excludes reformulated gasoline blendstock for oxygenate blending (RBOB).

**Motor Gasoline Blending.** Mechanical mixing of motor gasoline blending components and oxygenates to produce finished motor gasoline. Mechanical mixing of finished motor gasoline with motor gasoline blending components or oxygenates which results in increased volumes of finished motor gasoline, and/or changes in the classification of finished motor gasoline (e.g., other finished motor gasoline mixed with MTBE to produce oxygenated motor gasoline), is considered motor gasoline blending.

**Motor Gasoline Blending Components.** Naphthas which will be used for blending or compounding into finished motor gasoline (e.g., straight-run gasoline, alkylate, reformate, benzene, toluene, xylene) and includes reformulated gasoline blendstock for oxygenate blending (RBOB). Excludes oxygenates (alcohols, ethers), butane, and pentanes plus. Oxygenates are reported as individual components and included in the total for other hydrocarbons, hydrogens, and oxygenates.

**MTBE (Methyl tertiary butyl ether) (CH<sub>3</sub>)<sub>3</sub>COCH<sub>3</sub>.** An ether intended for gasoline blending as described in Oxygenate definition.

**Naphtha.** A generic term applied to a petroleum fraction with an approximate boiling range between 122° and 400° F.

**Naphtha Less Than 401° F.** See **Petrochemical Feedstocks.**

**Naphtha-Type Jet Fuel.** A fuel in the heavy naphtha boiling range. ASTM Specification D1655 specifies for this fuel maximum distillation temperatures of 290° F at the 20-percent recovery point and 470° F at the 90-percent

point, meeting Military Specification MIL-T-5624L (Grade JP-4). JP-4 is used for turbojet and turboprop aircraft engines, primarily by the military. Excludes ram-jet and petroleum rocket fuels.

**Natural Gas.** A mixture of hydrocarbons and small quantities of various nonhydrocarbons existing in the gaseous phase or in solution with crude oil in underground reservoirs.

**Natural Gas Field Facility.** A field facility designed to process natural gas produced from more than one lease for the purpose of recovering condensate from a stream of natural gas; however, some field facilities are designed to recover propane, normal butane, pentanes plus, etc., and to control the quality of natural gas to be marketed.

**Natural Gas Plant Liquids.** Natural gas liquids recovered from natural gas in gas processing plants, and in some situations, from natural gas field facilities. Natural gas liquids extracted by fractionators are also included. These liquids are defined according to the published specifications of the Gas Processors Association and the American Society for Testing and Materials and are classified as follows: ethane, propane, normal butane, isobutane, and pentanes plus.

**Natural Gas Processing Plant.** A facility designed (1) to achieve the recovery of natural gas liquids from the stream of natural gas which may or may not have been processed through lease separators and field facilities, and (2) to control the quality of the natural gas to be marketed. Cycling plants are classified as gas processing plants.

**Natural Gasoline and Isopentane.** A mixture of hydrocarbons, mostly pentanes and heavier, extracted from natural gas, that meets vapor pressure, end-point, and other specifications for natural gasoline set by the Gas Processors Association. Includes isopentane which is a saturated branch-chain hydrocarbon, ( $C_5H_{12}$ ), obtained by fractionation of natural gasoline or isomerization of normal pentane.

**Net Receipts.** The difference between total movements into and total movements out of each PAD District by pipeline, tanker, and barge.

**Normal Butane.** See Butane.

**OPEC.** The acronym for the Organization of Petroleum Exporting Countries, that have organized for the purpose of negotiating with oil companies on matters of oil production, prices and future concession rights. Current members are Algeria, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, United Arab Emirates, and Venezuela. The Neutral Zone between Kuwait and Saudi Arabia is considered part of OPEC.

Prior to January 1, 1993, Ecuador was a member of OPEC. Prior to January 1995, Gabon was a member of OPEC.

**OPRG.** "Oxygenated Fuels Program Reformulated Gasoline" is reformulated gasoline which is intended for use in an oxygenated fuels program control area during an oxygenated fuels program control period.

**Operable Capacity.** The amount of capacity that, at the beginning of the period, is in operation; not in operation and not under active repair, but capable of being placed in operation within 30 days; or not in operation but under active repair that can be completed within 90 days. Operable capacity is the sum of the operating and idle capacity and is measured in barrels per calendar day or barrels per stream day.

**Operating Capacity.** The component of operable capacity that is in operation at the beginning of the period.

**Operable Utilization Rate.** Represents the utilization of the atmospheric crude oil distillation units. The rate is calculated by dividing the gross input to these units by the operable refining capacity of the units.

**Operating Utilization Rate.** Represents the utilization of the atmospheric crude oil distillation units. The rate is calculated by dividing the gross input to these units by the operating refining capacity of the units.

**Other Finished.** See Motor Gasoline (Finished).

**Other Hydrocarbons.** Materials received by a refinery and consumed as a raw material. Includes hydrogen, coal tar derivatives, gilsonite, and natural gas received by the refinery for reforming into hydrogen. Natural gas to be used as fuel is excluded.

**Other Oils Equal To or Greater Than 401° F.** See Petrochemical Feedstocks.

**Other Oxygenates.** Other aliphatic alcohols and aliphatic ethers intended for motor gasoline blending (e.g., isopropyl ether (IPE) or n-propanol).

**Oxygenated Gasoline.** See Motor Gasoline (Finished).

**Oxygenates.** Any substance which, when added to gasoline, increases the amount of oxygen in that gasoline blend. Through a series of waivers and interpretive rules, the Environmental Protection Agency (EPA) has determined the allowable limits for oxygenates in unleaded gasoline. The "Substantially Similar" Interpretive Rules (56 FR (February 11, 1991)) allows blends of aliphatic alcohols other than methanol and aliphatic ethers, provided the oxygen content does not exceed 2.7 percent



by weight. The "Substantially Similar" Interpretive Rules also provides for blends of methanol up to 0.3 percent by volume exclusive of other oxygenates, and butanol or alcohols of a higher molecular weight up to 2.75 percent by weight. Individual waivers pertaining to the use of oxygenates in unleaded gasoline have been issued by the EPA. They include:

**Fuel Ethanol.** Blends of up to 10 percent by volume anhydrous ethanol (200 proof) (commonly referred to as the "gasohol waiver").

**Methanol.** Blends of methanol and gasoline-grade tertiary butyl alcohol (GTBA) such that the total oxygen content does not exceed 3.5 percent by weight and the ratio of methanol to GTBA is less than or equal to 1. It is also specified that this blended fuel must meet ASTM volatility specifications (commonly referred to as the "ARCO" waiver).

Blends of up to 5.0 percent by volume methanol with a minimum of 2.5 percent by volume cosolvent alcohols having a carbon number of 4 or less (i.e., ethanol, propanol, butanol, and/or GTBA). The total oxygen must not exceed 3.7 percent by weight, and the blend must meet ASTM volatility specifications as well as phase separation and alcohol purity specifications (commonly referred to as the "DuPont" waiver).

**MTBE (Methyl tertiary butyl ether).** Blends up to 15.0 percent by volume MTBE which must meet the ASTM D4814 specifications. Blenders must take precautions that the blends are not used as base gasolines for other oxygenated blends (commonly referred to as the "Sun" waiver).

**Pentanes Plus.** A mixture of hydrocarbons, mostly pentanes and heavier, extracted from natural gas. Includes isopentane, natural gasoline, and plant condensate.

**Persian Gulf.** The countries that comprise the Persian Gulf are: Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and the United Arab Emirates.

**Petrochemical Feedstocks.** Chemical feedstocks derived from petroleum principally for the manufacture of chemicals, synthetic rubber, and a variety of plastics. The categories reported are "Naphtha Less Than 401° F" and "Other Oils Equal To or Greater Than 401° F."

**Naphtha Less Than 401° F.** A naphtha with a boiling range of less than 401° F that is intended for use as a petrochemical feedstock.

**Other Oils Equal To or Greater Than 401° F.** Oils with a boiling range equal to or greater than 401° F that are intended for use as a petrochemical feedstock.

**Petroleum Administration for Defense (PAD) Districts.** Geographic aggregations of the 50 States and the District of Columbia into five districts by the Petroleum Administration for Defense in 1950. These districts were originally defined during World War II for purposes of administering oil allocation.

**Petroleum Coke.** A residue, the final product of the condensation process in cracking. This product is reported as marketable coke or catalyst coke. The conversion factor is 5 barrels per short ton.

**Marketable Coke.** Those grades of coke produced in delayed or fluid cokers which may be recovered as relatively pure carbon. This "green" coke may be sold as is or further purified by calcining.

**Catalyst Coke.** In many catalytic operations (e.g., catalytic cracking) carbon is deposited on the catalyst, thus deactivating the catalyst. The catalyst is reactivated by burning off the carbon, which is used as a fuel in the refining process. This carbon or coke is not recoverable in a concentrated form.

**Petroleum Products.** Petroleum products are obtained from the processing of crude oil (including lease condensate), natural gas, and other hydrocarbon compounds. Petroleum products include unfinished oils, liquefied petroleum gases, pentanes plus, aviation gasoline, motor gasoline, naphtha-type jet fuel, kerosene-type jet fuel, kerosene, distillate fuel oil, residual fuel oil, petrochemical feedstocks, special naphthas, lubricants, waxes, petroleum coke, asphalt, road oil, still gas, and miscellaneous products.

**Pipeline (Petroleum).** Crude oil and product pipelines used to transport crude oil and petroleum products respectively, (including interstate, intrastate, and intracompany pipelines) within the 50 States and the District of Columbia.

**Plant Condensate.** One of the natural gas liquids, mostly pentanes and heavier hydrocarbons, recovered and separated as liquids at gas inlet separators or scrubbers in processing plants.

**Processing Gain.** The volumetric amount by which total output is greater than input for a given period of time. This difference is due to the processing of crude oil into products which, in total, have a lower specific gravity than the crude oil processed.

**Processing Loss.** The volumetric amount by which total refinery output is less than input for a given period of time. This difference is due to the processing of crude oil into products which, in total, have a higher specific gravity than the crude oil processed.

**Product Supplied, Crude Oil.** Crude oil burned on leases and by pipelines as fuel.

**Production Capacity.** The maximum amount of product that can be produced from processing facilities.

**Products Supplied.** Approximately represents consumption of petroleum products because it measures the disappearance of these products from primary sources, i.e., refineries, natural gas processing plants, blending plants, pipelines, and bulk terminals. In general, product supplied of each product in any given period is computed as follows: field production, plus refinery production, plus imports, plus unaccounted for crude oil, (plus net receipts when calculated on a PAD District basis), minus stock change, minus crude oil losses, minus refinery inputs, minus exports.

**Propane (C<sub>3</sub>H<sub>8</sub>).** A normally gaseous straight-chain hydrocarbon. It is a colorless paraffinic gas that boils at a temperature of -43.67° F. It is extracted from natural gas or refinery gas streams. It includes all products designated in ASTM Specification D1835 and Gas Processors Association Specifications for commercial propane and HD-5 propane.

**Propylene (C<sub>3</sub>H<sub>6</sub>).** An olefinic hydrocarbon recovered from refinery processes or petrochemical processes.

**RBOB.** "Reformulated Gasoline Blendstock for Oxygenate Blending" is a motor gasoline blending component which, when blended with a specified type and percentage of oxygenate, meets the definition of reformulated gasoline.

**Refinery.** An installation that manufactures finished petroleum products from crude oil, unfinished oils, natural gas liquids, other hydrocarbons, and oxygenates.

**Refinery Input, Crude Oil.** Total crude oil (domestic plus foreign) input to crude oil distillation units and other refinery processing units (cokers, etc.).

**Refinery Input, Total.** The raw materials and intermediate materials processed at refineries to produce finished petroleum products. They include crude oil, products of natural gas processing plants, unfinished oils, other hydrocarbons and oxygenates, motor gasoline and aviation gasoline blending components and finished petroleum products.

**Refinery Production.** Petroleum products produced at a refinery or blending plant. Published production of these products equals refinery production minus refinery input. Negative production will occur when the amount of a product produced during the month is less than the amount of that same product that is reprocessed (input) or reclassified to become another product during the same month.

Refinery production of unfinished oils, and motor and aviation gasoline blending components appear on a net basis under refinery input.

**Refinery Yield.** Refinery yield (expressed as a percentage) represents the percent of finished product produced from input of crude oil and net input of unfinished oils. It is calculated by dividing the sum of crude oil and net unfinished input into the individual net production of finished products. Before calculating the yield for finished motor gasoline, the input of natural gas liquids, other hydrocarbons and oxygenates, and net input of motor gasoline blending components must be subtracted from the net production of finished motor gasoline. Before calculating the yield for finished aviation gasoline, input of aviation gasoline blending components must be subtracted from the net production of finished aviation gasoline.

**Reformulated Gasoline.** See Motor Gasoline (Finished).

**Residual Fuel Oil.** The heavier oils that remain after the distillate fuel oils and lighter hydrocarbons are distilled away in refinery operations and that conform to ASTM Specification D396. Included are No. 5, a residual fuel oil of medium viscosity; Navy Special, for use in steam-powered vessels in government service and in shore power plants; No. 6, which includes Bunker C fuel oil, and is used for commercial and industrial heating, electricity generation and to power ships.

**Residuum.** Residue from crude oil after distilling off all but the heaviest components, with a boiling range greater than 1000° F.

**Road Oil.** Any heavy petroleum oil, including residual asphaltic oil used as a dust palliative and surface treatment on roads and highways. It is generally produced in six grades from 0, the most liquid, to 5, the most viscous.

**Shell Storage Capacity.** The design capacity of a petroleum storage tank which is always greater than or equal to working storage capacity.

**Special Naphthas.** All finished products within the naphtha boiling range that are used as paint thinners, cleaners, or solvents. These products are refined to a specified flash point. Special naphthas include all commercial hexane and cleaning solvents conforming to ASTM Specification D1836 and D484, respectively. Naphthas to be blended or marketed as motor gasoline or aviation gasoline, or that are to be used as petrochemical and synthetic natural gas (SNG) feedstocks are excluded.



**Steam (Purchased).** Steam, purchased for use by a refinery, that was not generated from within the refinery complex.

**Still Gas (Refinery Gas).** Any form or mixture of gases produced in refineries by distillation, cracking, reforming, and other processes. The principal constituents are methane, ethane, ethylene, normal butane, butylene, propane, propylene, etc. Still gas is used as a refinery fuel and a petrochemical feedstock. The conversion factor is 6 million BTU's per fuel oil equivalent barrel.

**Stock Change.** The difference between stocks at the beginning of the month and stocks at the end of the month. A negative number indicates a decrease in stocks and a positive number indicates an increase in stocks.

**Strategic Petroleum Reserve (SPR).** Petroleum stocks maintained by the Federal Government for use during periods of major supply interruption.

**Sulfur.** A yellowish nonmetallic element, sometimes known as "brimstone".

**Supply.** The components of petroleum supply are field production, refinery production, imports, and net receipts when calculated on a PAD District basis.

**TAME (Tertiary amyl methyl ether)**  $(CH_3)_2(C_2H_5)COCH_3$ . An oxygenate blend stock formed by the catalytic etherification of isoamylene with methanol.

**Tank Farm.** An installation used by gathering and trunk pipeline companies, crude oil producers, and terminal operators (except refineries) to store crude oil.

**Tanker and Barge.** Vessels that transport crude oil or petroleum products. Data are reported for movements between PAD Districts; from a PAD District to the Panama Canal; or from the Panama Canal to a PAD District.

**TBA (Tertiary butyl alcohol)**  $(CH_3)_3COH$ . An alcohol primarily used as a chemical feedstock, a solvent or feedstock for isobutylene production for MTBE; produced as a co-product of propylene oxide production or by direct hydration of isobutylene.

**Thermal Cracking.** A refining process in which heat and pressure are used to break down, rearrange, or combine hydrocarbon molecules. Thermal cracking includes gas oil, visbreaking, fluid coking, delayed coking, and other thermal cracking processes (e.g., flexicoking). See individual categories for definition.

**Toluene**  $(C_6H_5CH_3)$ . Colorless liquid of the aromatic group of petroleum hydrocarbons, made by the catalytic reforming of petroleum naphthas containing methyl cyclohexane. A high-octane gasoline-blending agent, solvent, and chemical intermediate, base for TNT.

**Unaccounted for Crude Oil.** Represents the arithmetic difference between the calculated supply and the calculated disposition of crude oil. The calculated supply is the sum of crude oil production plus imports minus changes in crude oil stocks. The calculated disposition of crude oil is the sum of crude oil input to refineries, crude oil exports, crude oil burned as fuel, and crude oil losses.

**Unfinished Oils.** Includes all oils requiring further processing, except those requiring only mechanical blending. Includes naphthas and lighter oils, kerosene and light gas oils, heavy gas oils, and residuum. See individual categories for definition.

**Unfractionated Streams.** Mixtures of unsegregated natural gas liquid components excluding those in plant condensate. This product is extracted from natural gas.

**United States.** The United States is defined as the 50 States and the District of Columbia.

**Vacuum Distillation.** Distillation under reduced pressure (less the atmospheric) which lowers the boiling temperature of the liquid being distilled. This technique with its relatively low temperatures prevents cracking or decomposition of the charge stock.

**Visbreaking.** A thermal cracking process in which heavy atmospheric or vacuum-still bottoms are cracked at moderate temperatures to increase production of distillate products and reduce viscosity of the distillation residues.

**Wax.** A solid or semi-solid material derived from petroleum distillates or residues by such treatments as chilling, precipitating with a solvent, or de-oiling. It is light-colored, more-or-less translucent crystalline mass, slightly greasy to the touch, consisting of a mixture of solid hydrocarbons in which the paraffin series predominates. Includes all marketable wax whether crude scale or fully refined. The three grades included are microcrystalline, crystalline-fully refined, and crystalline-other. The conversion factor is 280 pounds per 42 U.S. gallons per barrel.

**Microcrystalline Wax.** Wax extracted from certain petroleum residues having a finer and less apparent crystalline structure than paraffin wax and having the following physical characteristics: penetration at 77° F (D1321)-60 maximum; viscosity at 210° F in Saybolt Universal Seconds (SUS); (D88)-60 SUS (10.22 centis-

tokes) minimum to 150 SUS (31.8 centistokes) maximum; oil content (D721)-5 percent minimum.

**Crystalline-Fully Refined Wax.** A light-colored paraffin wax having the following characteristics: viscosity at 210° F (D88)-59.9 SUS (10.18 centistokes) maximum; oil content (D721)-0.5 percent maximum; other +20 color, Saybolt minimum.

**Crystalline-Other Wax.** A paraffin wax having the following characteristics: viscosity at 210° F (D88)-59.9 SUS (10.18 centistokes) maximum; oil content (D721)-0.51 percent minimum to 15 percent maximum.

**Working Storage Capacity.** The difference in volume between the maximum safe fill capacity and the quantity below which pump suction is ineffective (bottoms).

**Xylene ( $C_6H_4(CH_3)_2$ ).** Colorless liquid of the aromatic group of hydrocarbons made the catalytic reforming of certain naphthenic petroleum fractions. Used as high-octane motor and aviation gasoline blending agents, solvents, chemical intermediates. Isomers are metaxylene, orthoxylene, paraxylene.













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